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NATIONAL WATER QUALITY NETWORK ANNUAL COMPILATION OF DATA, OCTOBER 1, 1961-SEPTEMBER 30, 1962

Robert A. Taft Sanitary Engineering Center
Cincinnati, Ohio

1962

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National Water Quality Network

ANNUAL COMPILATION OF DATA

October 1, 1961–September 30, 1962

A Federal, State and local cooperative report on
water quality determinations of surface waters at
selected locations throughout the United States

* * *

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Public Health Service, *Division of Water Supply and Pollution Control* • Washington, D.C. 20201

918

RELATED PUBLICATIONS:

National Water Quality Network
Annual Compilation of Data, October 1, 1957–September 30, 1958
Public Health Service Publication No. 663 (1958 Edition)

National Water Quality Network
Statistical Summary of Selected Data, October 1, 1957–September 30, 1958
Public Health Service Publication No. 663—Supplement I

National Water Quality Network
Annual Compilation of Data, October 1, 1958–September 30, 1959
Public Health Service Publication No. 663 (1959 Edition)

National Water Quality Network
Annual Compilation of Data, October 1, 1959–September 30, 1960
Public Health Service Publication No. 663 (1960 Edition)

National Water Quality Network
Plankton Population Dynamics, July 1, 1959–June 30, 1961
Public Health Service Publication No. 663—Supplement 2

National Water Quality Network
Annual Compilation of Data, October 1, 1960–September 30, 1961
Public Health Service Publication No. 663 (1961 Edition)

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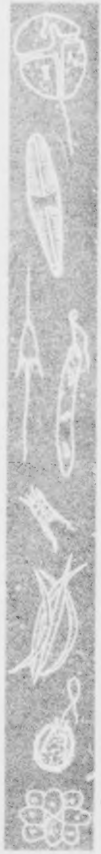
(1962 Edition)

ACKNOWLEDGMENT

To increase the usefulness of the water quality data, annual compilations since 1958, including this one, have presented preliminary and unadjusted flow data for gauging stations at or near most of the National Water Quality Network sampling points. Final data may be obtained directly from the agency concerned. Any studies using the provisional flow data herein compiled should verify the data prior to completion of reports on such studies. For making the flow information available for this publication, grateful acknowledgment is made by the Public Health Service to:

The International Boundary and Water Commission, United States and Mexico
The U.S. Department of the Interior
Bureau of Reclamation ● Geological Survey
The U.S. Department of the Army
Corps of Engineers ● Lake Survey



FOREWORD

This is the fifth annual compilation of data from the National Water Quality Network of the Public Health Service. During this year the Network was increased from 93 to 122 stations. The data have revealed interesting findings, particularly with respect to synthetic organic chemicals such as insecticides and pesticides, in our surface waters. Sufficient data have been accumulated to define trends in certain areas, such as radioactivity.

The Public Health Service gratefully acknowledges the assistance to our Network of the participating local, State and Federal government agencies and private industry. The success of this program depends, in large measure, upon their continued interest and support.

GORDON E. McCALLUM, D. Sc.,
Assistant Surgeon General,
Chief, Division of Water Supply and Pollution Control

ANALYTICAL AND FLOW DATA INDEX

STATION	Radioactivity Determinations	Plankton Populations	Organic Chemicals	Chemical, Physical and Bacteriological Analyses	Flow Data	Strontium 90	Trace Elements
	Page No.	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*
Allegheny River							
at Pittsburgh, Pa.	39	40–41	42	43–45	46	897	903
Animas River							
at Cedar Hill, N. Mex.	48–49	50–51	47	52–53	54	897	903
Apalachicola River							
at Chattahoochee, Fla.	55	56–57	58	59–60	61	897	903
Arkansas River							
at Pendleton Ferry, Ark.	64	62–63	—	65	66	897	903
near Ponca City, Okla.	68–69	70–71	67	72–73	74	897	903
at Coolidge, Kans.	76–77	78–79	75	80	81	897	903
Bear River							
above Preston, Idaho	84	82–83	85	86	87	897	903
Big Horn River							
at Hardin, Mont.	90	88–89	—	91–92	93	897	903
Big Sioux River							
below Sioux Falls, S. Dak.	94–95	96–97	—	98–99	100	897	903
Chattahoochee River							
at Columbus, Ga.	101	102–103	104	105–106	107	897	903
at Lanett, Ala.	110	108–109	111	112	113	897	903
at Atlanta, Ga.	114–115	116–117	118	119–120	121	897	903
Chena Slough							
at Fairbanks, Alaska	124	122–123	—	125	126	897	903
Clearwater River							
at Lewiston, Idaho	128–129	130–131	127	132–133	134	897	903

Dash (—) indicates no determination made.

ANALYTICAL AND FLOW DATA INDEX—Continued

STATION	Radioactivity Determinations	Plankton Populations	Organic Chemicals	Chemical, Physical and Bacteriological Analyses	Flow Data	Strontium 90	Trace Elements
	Page No.	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*
Clinch River							
above Kingston, Tenn.	135	136–137	138	139	140	897	903
at Clinton, Tenn.	141	142–143	—	144	145	897	903
Colorado River							
at Yuma, Ariz.	146–147	148–149	150	151–152	153	897	904
above Parker Dam, Ariz.–Calif.	156	154–155	157	158	159	897	904
near Boulder City, Nev.	160–161	162–163	164	165–166	167	897	904
at Page, Ariz.	170	168–169	171	172–173	174	897	904
at Loma, Colo.	176–177	178–179	—	180–181	175	897	904
Columbia River							
at Clatskanie, Oreg.	184	182–183	185	186	187	897	904
at Bonneville, Oreg.	190	188–189	191	192	193	897	904
at McNary Dam, Oreg.	194–195	196–197	198	199	200	897	904
at Pasco, Wash.	202–203	204–205	201	206–207	208	897	904
at Wenatchee, Wash.	210–211	212–213	209	214–215	216	897	904
at Northport, Wash.	217	218–219	220	221	222	897	904
Connecticut River							
at Enfield Dam, Conn.	223	224–225	226	227	228	897	904
below Northfield, Mass.	230–231	232–233	—	234–235	229	897	904
at Wilder, Vt.	238	236–237	239	240	241	897	904
Cumberland River							
at Clarksville, Tenn.	244	242–243	—	245	246	897	904
Delaware River							
at Philadelphia, Pa.	247	248–249	250	251–252	253	897	904
at Trenton, N.J.	256	254–255	—	257–258	259	897	904
at Martin's Creek, Pa.	260–261	252–263	264	265–266	267	897	904
Escambia River							
at Century, Fla.	270	268–269	271	272	273	897	904

ANALYTICAL AND FLOW DATA INDEX—Continued

STATION	Radioactivity Determinations	Plankton Populations	Organic Chemicals	Chemical, Physical and Bacteriological Analyses	Flow Data	Strontium 90	Trace Elements
	Page No.	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*
Great Lakes							
Lake Erie at Buffalo, N.Y.	274–275	276–277	278	279–280	281	898	905
Lake Huron, Detroit River at Detroit, Mich.	282–283	284–285	286	287–288	289	898	905
Lake Huron, St. Clair River at Port Huron, Mich.	290–291	292–293	294	295–296	297	898	905
Lake Michigan at Gary, Ind.	298–299	300–301	302	303–304	305	898	905
Lake Michigan at Milwaukee, Wis.	306–307	308–309	310	311–312	313	898	905
Lake Superior, St. Mary's River at Sault Ste. Marie, Mich.	314–315	316–317	318	319–320	321	898	905
Lake Superior at Duluth, Minn.	322–323	324–325	326	327–328	329	898	905
Green River							
at Dutch John, Utah	332	330–331	—	333	334	898	905
Hudson River							
below Poughkeepsie, N.Y.	335	336–337	338	339	340	898	905
Illinois River							
near Grafton, Ill	342–343	344–345	341	346	347	898	905
at Peoria, Ill.	348–349	350–351	352	353–354	355	898	905
Kanawha River							
at Winfield Dam, W. Va.	356–357	358–359	360	361–362	363	898	905
Klamath River							
near Keno, Oreg.	364–365	366–367	368	369	370	898	905
Little Miami River							
at Cincinnati, Ohio	372–373	374–375	371	376–377	378	898	905
Merrimack River							
above Lowell, Mass.	379	380–381	382	383	384	898	—

ANALYTICAL AND FLOW DATA INDEX—Continued

STATION	Radioactivity Determinations	Plankton Populations	Organic Chemicals	Chemical, Physical and Bacteriological Analyses	Flow Data	Strontium 90	Trace Elements
	Page No.	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*
Mississippi River							
at New Orleans, La.	386–387	388–389	385	390–391	392	898	905
at Vicksburg, Miss.	394–395	396–397	393	398–399	400	898	905
at Delta, La.	401	402–403	—	—	404	898	905
at West Memphis, Ark.	405	406–407	408	409–410	411	898	905
at Cape Girardeau, Mo.	412–413	414–415	416	417–418	419	898	906
at East St. Louis, Ill.	420–421	422–423	424	425–426	427	898	906
at Burlington, Iowa	428–429	430–431	432	433	434	898	906
at Dubuque, Iowa	435	436–437	438	439	440	898	906
at Lock & Dam No. 3 below St. Paul, Minn.	442–443	444–445	441	446–447	448	898	906
Missouri River							
at St. Louis, Mo.	450–451	452–453	449	454–455	456	898	906
at Missouri City, Mo.	457	458–459	—	460	461	898	906
at Kansas City, Kans.	462–463	464–465	466	467–468	469	898	906
at St. Joseph, Mo.	470–471	472–473	474	475–476	477	898	906
at Omaha, Nebr.	478–479	480–481	482	483–484	485	898	906
at Yankton, S. Dak.	486–487	488–489	490	491–492	493	898	906
at Bismarck, N. Dak.	494–495	496–497	498	499–500	501	898	906
at Williston, N. Dak.	502–503	504–505	506	507–509	510	898	906
Monongahela River							
at Pittsburgh, Pa.	512–513	514–515	511	516–517	518	898	906
North Platte River							
above Henry, Nebr.	520–521	522–523	519	524–525	526	898	906
Ohio River							
at Cairo, Ill.	527	528–529	530	531–532	533	899	907
at Evansville, Ind.	534–535	536–537	538	539–541	542	899	907
at Louisville, Ky.	544–545	546–547	543	548–549	550	899	907
at Cincinnati, Ohio	552–553	554–555	551	556–557	558	899	907
at Huntington, W. Va.	559	560–561	562	563–565	566	899	907
below Addison, Ohio	567	568–569	570	571	572	899	907
at East Liverpool, Ohio	573	574–575	576	577	578	899	—

ANALYTICAL AND FLOW DATA INDEX—Continued

STATION	Radioactivity Determinations	Plankton Populations	Organic Chemicals	Chemical, Physical and Bacteriological Analyses	Flow Data	Strontium 90	Trace Elements
	Page No.	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*
Ouachita River							
at Bastrop, La.	580–581	582–583	—	584–585	579	899	907
Pend Oreille River							
at Albeni Falls Dam, Idaho	588	586–587	589	590	591	899	907
Platte River							
above Plattsmouth, Nebr.	592–593	594–595	—	596–597	598	899	907
Potomac River							
at Great Falls, Md.	600–601	602–603	599	604–605	606	899	907
at Williamsport, Md.	608–609	610–611	607	612–614	615	899	907
Rainy River							
at Baudette, Minn.	618	616–617	619	620	621	899	907
at International Falls, Minn.	624	622–623	625	626–627	628	899	907
Raritan River							
at Perth Amboy, N.J.	629	630–631	632	633–634	635	899	—
Red River (North)							
at Grand Forks, N. Dak.	638	636–637	—	639	640	899	—
Red River (South)							
at Alexandria, La.	642–643	644–645	—	641	646	899	907
at Bossier City, La.	647	648–649	—	650	651	899	907
at Index, Ark.	654	652–653	—	655	656	899	907
at Denison, Tex.	658–659	660–661	657	662–663	664	899	907
Rio Grande							
at Brownsville, Tex.	666–667	668–669	665	670–671	672	899	908
at Laredo, Tex.	674–675	676–677	673	678–679	680	899	908
at El Paso, Tex.	681	682–683	684	685	686	899	908
below Alamosa, Colo.	687	688–689	—	690	691	899	908

ANALYTICAL AND FLOW DATA INDEX—Continued

STATION	Radioactivity Determinations	Plankton Populations	Organic Chemicals	Chemical, Physical and Bacteriological Analyses	Flow Data	Strontium 90	Trace Elements
	Page No.	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*
Roanoke River *at John H. Kerr Dam and Reservoir, Va.*	692–693	694–695	696	697	698	899	908
Sabine River *near Ruliff, Tex.*	700–701	702–703	699	704	705	899	908
Sacramento River *at Green's Landing above Courtland, Calif.*	708	706–707	709	710	711	899	908
St. Lawrence River *at Massena, N.Y.*	712–713	714–715	716	717–718	719	899	908
San Joaquin River *near Vernalis, Calif.*	722	720–721	723	724	725	899	908
San Juan River *at Shiprock, N. Mex.*	726–727	728–729	730	731–732	733	899	908
Savannah River							
at Port Wentworth, Ga.	734–735	736–737	738	739–740	741	900	908
at North Augusta, S.C.	744	742–743	745	746–747	748	900	908
Schuylkill River *at Philadelphia, Pa.*	749	750–751	752	753–754	755	900	908
Shenandoah River *at Berryville, Va.*	756–757	758–759	760	761–762	763	900	908
Ship Creek *at Anchorage, Alaska*	766	764–765	—	767	768	900	—
Snake River							
at Ice Harbor Dam, Wash.	769	770–771	772	773	774	900	908
at Wawawai, Wash.	776–777	778–779	775	780–781	782	900	908
at Payette, Idaho	784–785	786–787	—	788–789	783	900	908

ANALYTICAL AND FLOW DATA INDEX—Continued

	Radioactivity Determinations	Plankton Populations	Organic Chemicals	Chemical, Physical and Bacteriological Analyses	Flow Data	Strontium 90	Trace Elements
	Page No.	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*	*Page No.*
South Platte River *at Julesburg, Colo.*	790–791	792–793	794	795–796	797	900	909
Spokane River *at Post Falls Dam, Idaho*	800	798–799	801	802	803	900	909
Susquehanna River							
at Conowingo, Md.	804–805	806–807	808	809–810	811	900	909
at Sayre, Pa	812–813	814–815	816	817–818	819	900	909
Tennessee River							
at Pickwick Landing, Tenn.	820–821	822–823	824	825–826	827	900	909
at Bridgeport, Ala.	830	828–829	831	832	833	900	909
at Chattanooga, Tenn.	836	834–835	837	838–839	840	900	909
at Lenoir City, Tenn.	841	842–843	844	845	846	900	909
Tombigbee River *below Columbus, Miss.*	848–849	850–851	847	852	853	900	909
Truckee River *at Calif.-Nev. Border at Farad, Calif.*	854–855	856–857	858	859	860	900	909
Verdigris River *at Nowata, Okla.*	861	862–863	864	865	866	900	909
Wabash River *at New Harmony, Ind.*	867	868–869	870	871	872	900	909
Willamette River *at Portland, Oreg.*	873	874–875	—	876	877	900	909
Yakima River *at Richland, Wash.*	878–879	880–881	882	883–884	885	900	909
Yellowstone River *near Sidney, Mont.*	886–887	888–889	890	891–892	893	900	909

The National Water Quality Network

The Public Health Service program for providing fundamental information on the quality of the Nation's waters stems from Public Law 660, approved July 9, 1956, as amended by Public Law 87-88, July 20, 1961. Section 4(c) thereof states: ". . . the Secretary (of Health, Education, and Welfare) shall in cooperation with other Federal, State, and local agencies having related responsibilities, collect and disseminate basic data on chemical, physical, and biological water quality insofar as such data or other information relate to water pollution and the prevention and control thereof."

To fulfill this responsibility, the National Water Quality Network collects, interprets, and disseminates:

a. Information on changes in water quality at key points in river systems, as such quality may be affected by changes in water use and development.

b. Continuous information on the nature and extent of pollutants affecting water quality.

c. Data which will be useful in the development of comprehensive water resources programs.

d. Data which will assist State, interstate, and other agencies in their water pollution control programs, and in the selection of sites for legitimate water uses.

Some 50 sampling stations were established when the program started, October 1, 1957. By September 30, 1962, the number had grown to 122.

Each sampling location satisfies one or more of the following criteria:

a. Major waterways used for public water supply, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses.

b. Interstate, coastal, and international boundary waters.

c. Waters on which activities of the Federal Government may have an impact.

Sampling station sites are fixed only after consultation with local, State, Federal and other agencies having related interests.

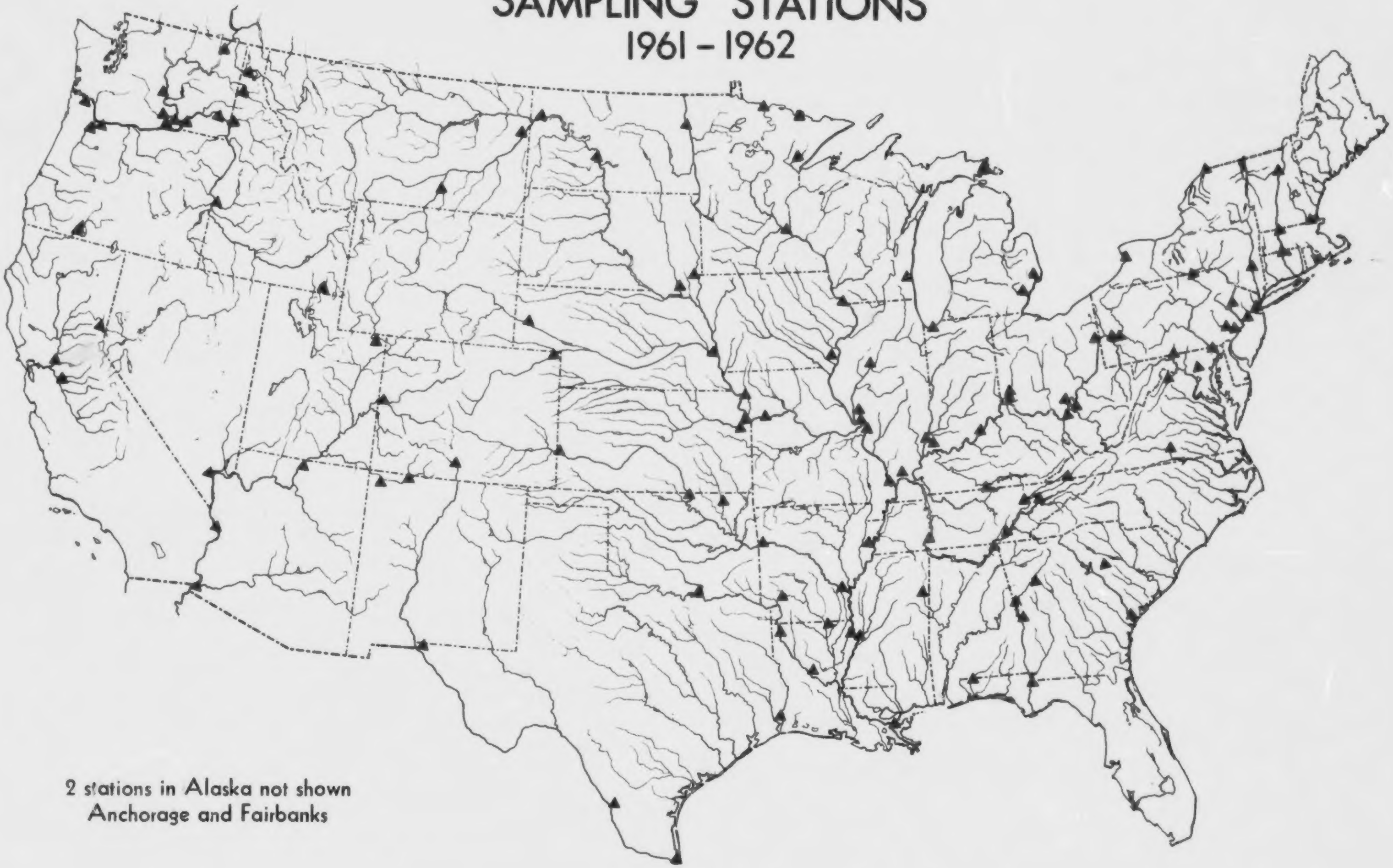
Active local participation is important in this operation. It assures maximum development of all information valuable both locally and nationally. Program costs are shared by the Federal Government and state and local agencies, those of the latter through contributions of laboratory and sampling manpower. Specifically, the State and local agencies perform certain of the conventional chemical analyses and collect samples for the newer, more complex examinations. The Public Health Service, in turn, performs the more complex determinations and makes the results available to the participants and to the public. In addition, the consultation, training facilities, and other resources of the Public Health Service are available to the cooperating agencies.

Locations of sampling stations in operation as of September 30, 1962, are shown on page 2. Descriptions of the stations, participating agencies, and other pertinent information are presented on pages 19 through 29.

Only after careful screening of needs in water resource development was a pattern set for analyses of water samples.

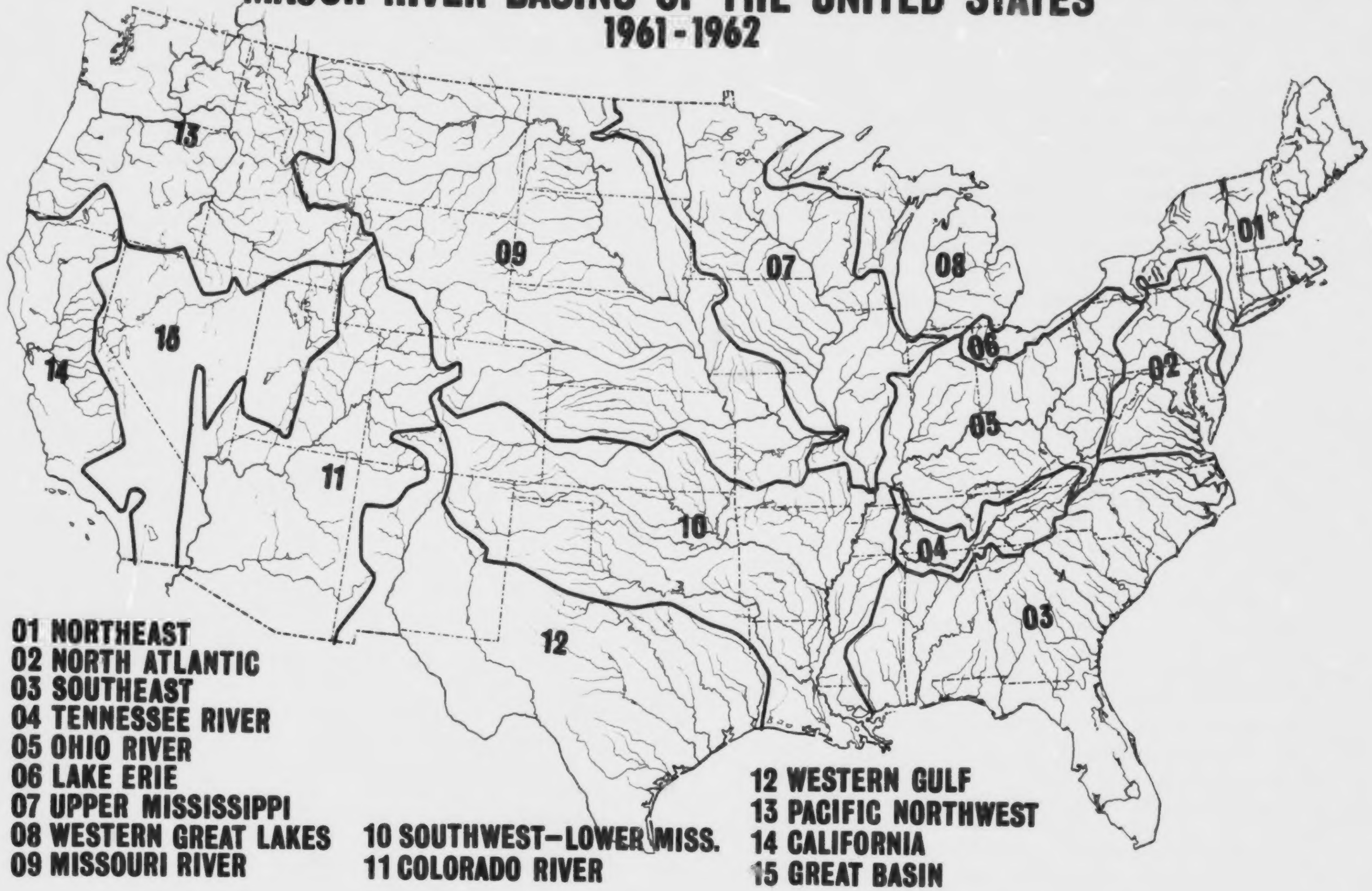
PHS *National Water Quality Network*

SAMPLING STATIONS
1961 – 1962



2 stations in Alaska not shown
Anchorage and Fairbanks

MAJOR RIVER BASINS OF THE UNITED STATES
1961-1962


01
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14
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01 NORTHEAST
02 NORTH ATLANTIC
03 SOUTHEAST
04 TENNESSEE RIVER
05 OHIO RIVER
06 LAKE ERIE
07 UPPER MISSISSIPPI
08 WESTERN GREAT LAKES
09 MISSOURI RIVER
10 SOUTHWEST—LOWER MISS.
11 COLORADO RIVER
12 WESTERN GULF
13 PACIFIC NORTHWEST
14 CALIFORNIA
15 GREAT BASIN

All Network samples are examined for:

a. Radioactivity.
   - (1) Gross alpha.
   - (2) Gross beta.
   - (3) Strontium 90.

b. Plankton populations.

c. Coliform organisms.

d. Organic chemicals.

e. Biochemical, chemical, and physical measurements, including biochemical oxygen demand (BOD), dissolved oxygen (DO), chemical oxygen demand (COD), chlorine demand, ammonia nitrogen, hydrogen ion concentration (pH), color turbidity, temperature, alkalinity (or acidity), hardness, chloride, sulfate, phosphates and total dissolved solids.

f. Sodium, potassium, boron, selenium and trace elements.

Samples for groups c and e were collected and analyzed weekly. Samples for organic chemicals were collected and analyzed monthly and plankton organism examinations were conducted semimonthly. Water samples for analysis of suspended and dissolved gross alpha and beta radioactivity were submitted weekly. Strontium 90 analyses were made on composites of weekly samples accumulated over 3-month periods. Sodium, potassium, boron, selenium and trace metals were determined on 4-month composites of weekly samples. New parameters which are developed and found significant will be included as the program continues.

Analytical Methods and Reliability of Data

The physical, chemical, and biochemical data included in this publication are the result of cooperative efforts of the agencies listed in column 6, pages 19–29. In general, most of these measurements were contributed by their laboratories. While it is recognized that individual laboratories make minor modifications to meet local conditions, the methods used in most cases are those published in the 11th edition, "Standard Methods for the Examination of Water and Wastewater." For uniformity, the chlorine demand test is reported on the basis of the starch-iodide titration procedure, and the chemical oxygen demand test is restricted to the use of 0.025 N reagents.

To assure continued reliability in the published data, frequent analysis of reference samples by each cooperating laboratory constitutes an integral part of the overall program. Periodically a synthetic standard sample is provided to each participant for reference analysis. The reported results are reviewed. Any significant errors are called to the attention of the reporting laboratory and, after the cause of the errors has been determined, the previously submitted data are either corrected or discarded. From these findings, the analyses reported in this compilation are believed to be accurate to ±10 percent of the reported values.

The analytical methods used by the Public Health Service laboratories are described in the discussion of water quality parameters which follows, and are covered by several of the references listed in the Bibliography.

Water Quality Parameters

In the assessment of water quality all of the legitimate purposes for which raw waters can be used, and which may be affected by pollution, must be considered. These may range from the minimum requirements necessary for navigation to the ultimate in water quality demanded for special industrial processing. Quality needs differ considerably, therefore, according to water use.

For domestic use, water must be free of disease organisms, clear, colorless, taste- and odor-free, and have a relatively low dissolved mineral content. Agricultural water is judged primarily on its mineral content, especially with respect to the ratio of sodium to other cations, and the presence of boron. Water for fish propagation and recreational purposes must be relatively free from domestic and industrial pollution and must be able to sustain an active flora of the smaller aquatic organisms on which fish and wildlife feed. Industrial water quality demands run the gamut from the complete absence of minerals to a requirement of low temperature, the critical factor in water used for cooling. The effects of radioactive materials on these uses have not yet been fully appraised.

The various laboratory examinations made as part of this program are discussed below.

Radioactivity

Radioactivity, long recognized as a contaminant of water from natural sources, has continued to grow in importance and health significance with the development of nuclear energy for both military and peaceful uses. Consequently, levels must be measured continually as new sources are established.

Gross alpha and beta measurements are made on both suspended and dissolved solids in the raw surface water samples. The total radioactivity in the dissolved solids provides a rough measure of the levels which may be found in a treated water, where water treatment removes substantially all of the suspended matter.

Beta activity levels generally reflect the variable contamination resulting from fallout and discharges from nuclear energy installations, institutions utilizing radioactive materials, and other manmade sources. The trend of gross beta radioactivity in samples received from 47 of the National Water Quality Network stations operating since 1957 is presented in Figure 1. During the last quarter of the 1961 calendar year and the first and second quarters of the 1962 calendar year, renewed weapons testing was responsible for the rise in gross beta radioactivity levels in the waters of the United States. During the third quarter of the 1962 calendar year the level decreased. This is attributable, for the most part, to the seasonal decrease of runoff. Radioactivity levels have remained well below the Public Health Service Drinking Water Standard of 1,000 $\mu\mu c/1$ (*19*).

Alpha levels reflect largely the activity added by uranium and thorium daughters. The waters of the United States can be characterized in a general way with respect to gross alpha radioactivity content. Such a characterization, based on National Water Quality Network data collected through the 1962 water year is presented in Figure 2.

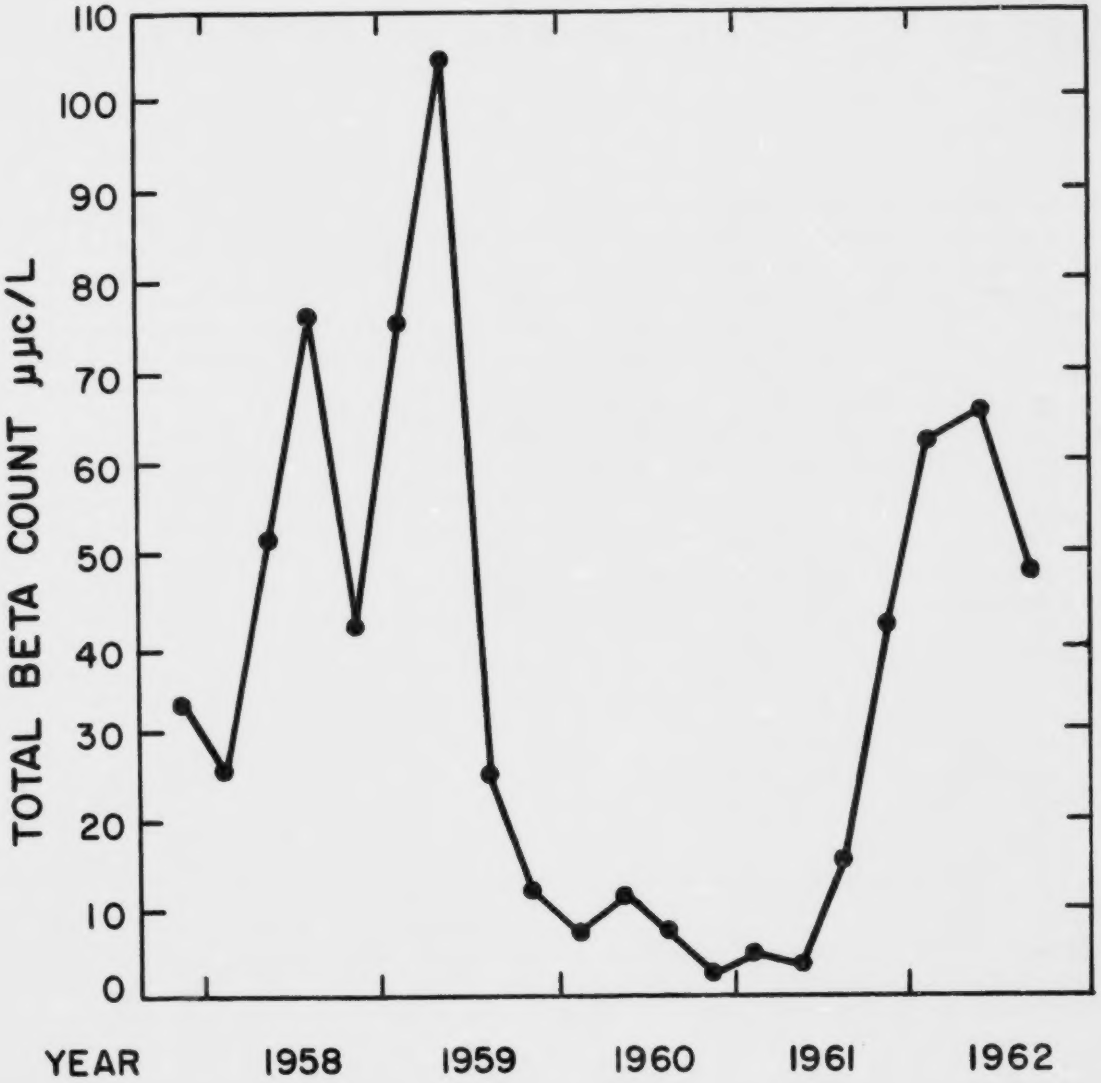

Figure 1. Gross Beta Radioactivity in the Surface Waters of the United States

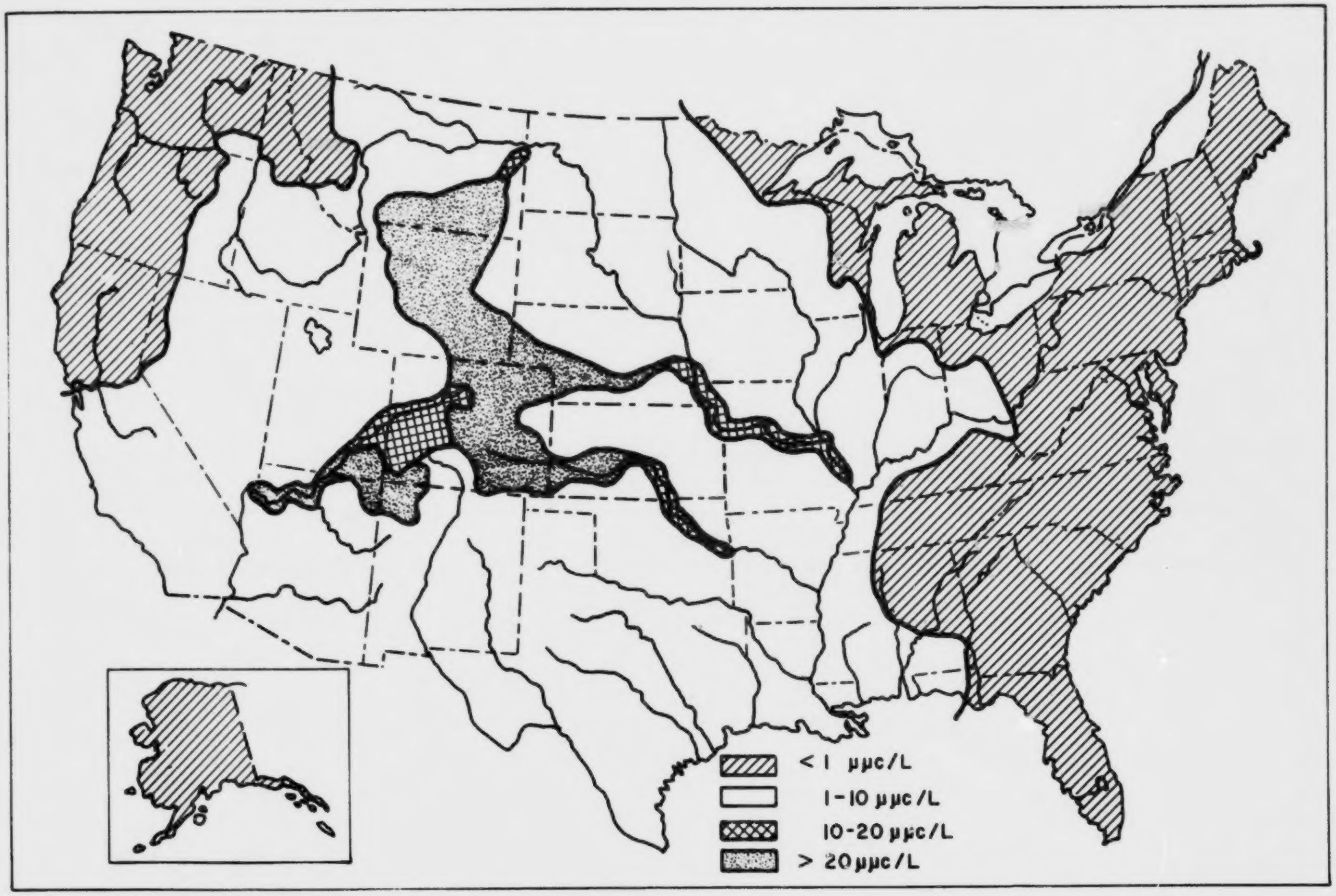
< 1 μμc/L
1-10 μμc/L
10-20 μμc/L
> 20 μμc/L

Figure 2. Gross Alpha Radioactivity Levels in the United States: 1957–62

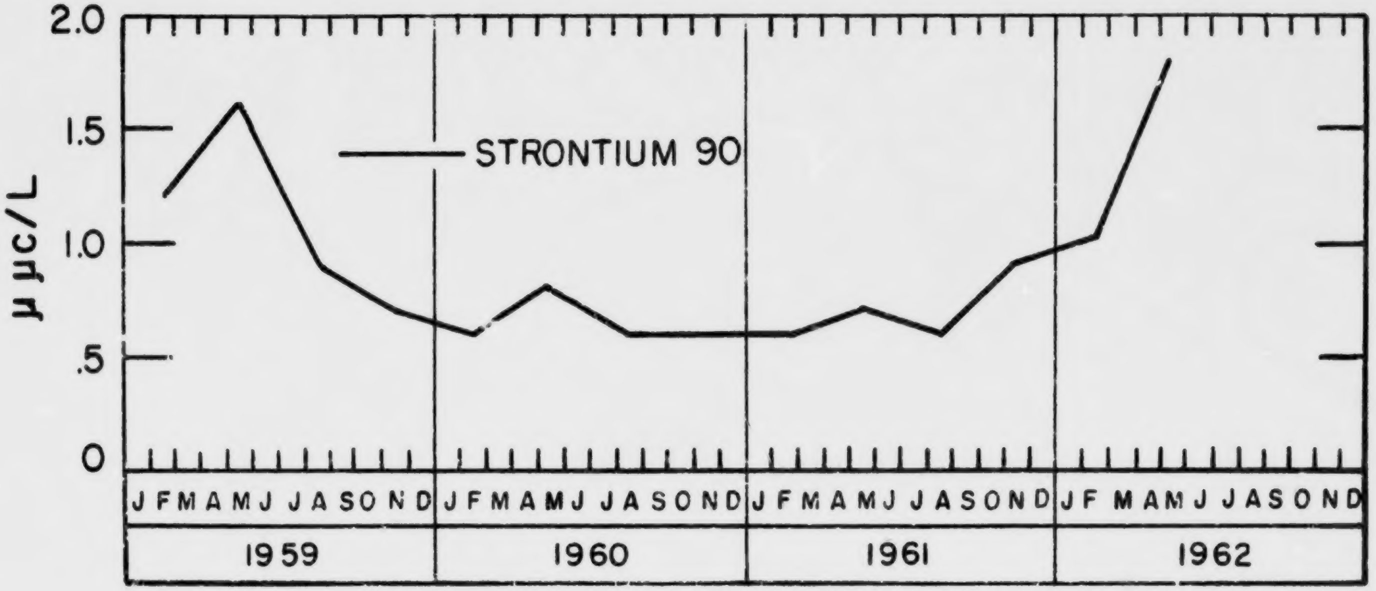

Figure 3. Strontium 90 in the Surface Waters of the United States

Gross levels are most informative in evaluating long-term trends or changes in water quality. By themselves, however, they are of limited value in assessing radiation exposure. Where gross results are consistently over the maximum permissible concentrations for mixed fission products, the identity of the specific radionuclides involved must be established.

Because of its significance in the environment, the concentration of Strontium 90 in the total solids is also reported. The levels ranged from 0.1 to 6.1 and the national quarterly average was less than the limit (10 $\mu\mu c/l$) specified in the Public Health Service Drinking Water Standards (*19*). The levels of Strontium 90 activity in the waters of the United States since the first quarter of the 1959 calendar year are presented graphically in Figure 3. Strontium 90 levels during the 1960–61 water year may be considered essentially background for the surface waters of the United States. The curve observed in Figure 3 shows an increase in these levels following the resumption of weapons testing in 1961. Levels increased steadily during the first three quarters of the 1961–62 water year, as did the gross beta radioactivity levels.

Populations of Plankton

Many aquatic organisms are sensitive to the various substances which enrich or pollute water. Some of these develop only in relatively clean water, while others may be stimulated to live and multiply in the presence of certain types of pollutants, especially household sewage and certain kinds of industrial wastes. On the other hand, excessive toxic substances may reduce or eradicate planktonic crops. Large populations of algae are sometimes induced to develop by mineralized products of sewage decomposition when nitrates and phosphates are made available as nutrients. Planktonic organisms are also important because of their ability to concentrate a wide variety of radionuclides. Impoundment of water by navigation or hydroelectric dams often increases the density of planktonic blooms.

The plankton data give the numbers, kinds and occurrences of algae and other aquatic microorganisms in the water. This information is useful in determining the pollutional status of any water resource, and in indicating the relative numbers of organisms which may cause problems in the treatment and use of water.

These organisms interfere with water use through shortening of filter runs in treatment plants, and by causing tastes, odors, coloration and various chemical and physical changes in the water environment. By regular and frequent reference to the plankton counts, it is possible to determine the procedures that will be required in treating the water for use.

In the stream or lake itself, many planktonic organisms are known to improve water quality by providing food and oxygen for desirable aquatic life and by aiding in the recovery of polluted water. They may form unsightly blooms, mats and slime growths; release toxic products which kill fish and other animals; and, upon dying and decomposing, exert a biochemical oxygen demand which uses up all oxygen in the water.

Domestic and industrial wastes influence the kinds and numbers (or diversity) of organisms. Hence, plankton may reflect changes in water quality resulting from changes in the wastes received by the stream containing suspended and dissolved substances. In addition, each geologic area of the United States has a distinctive phytoplankton population.

Relatively low phytoplankton counts ordinarily occur at sampling stations on the Great Lakes, the Columbia River, and on many rivers in the Southeast. Such stations as the Arkansas River at Ponca City, Okla., the Illinois River at Peoria, Ill., and the Mississippi River below St. Paul, Minn., show extremely high counts, but with lower species diversity. Waters receiving heavy organic waste loads at Winfield, W. Va., on the Kanawha River and on the upper Ohio River, however, show low plankton counts, probably resulting from toxic effects of wastes in the waters.

During the spring of 1962, unusually high total live phytoplankton counts were observed in the Ohio River at Cincinnati, Louisville, and Evansville. These high counts were followed in August and September by exceptionally low counts. Such deviations from the normal reflect changes in water quality which may be of real significance to treatment plant operators and to water pollution control authorities.

Counting Procedures

Sampling for plankton analysis is conducted semimonthly. Each sample consists of three liters of raw water, collected directly from the stream or a treatment plant intake. The sample is preserved during shipment by adding 100 ml. of preservative solution (0.1 percent Thimerosal, 0.1 percent sodium borate, and 0.2 percent Lugol's solution).

Phytoplankters are counted on the Sedgwick-Rafter slide. The analysis for nannoplankton is made by counting a 100-mm. strip on the Sedgwick-Rafter slide, using a 200 × magnification. The small centric and pennate diatoms (those not forming filaments or colonies) are identified from specially prepared hyrax slides using 900 × magnification and apochromatic resolution.

Rotifers, crustacea and other microinvertebrates are enumerated under a compound microscope at 100× magnification. A raw liter sample is settled and the sediment, when necessary, is washed of colloidal material and tiny silt particles. These microinvertebrates are counted in a special slide measuring 80 x 50 x 2 mm. These animals are known to be heavy consumers of phytoplankton and organic detritus, and they are an important link in the food chain supporting fish populations.

Identification of diatom species and their proportional census is done from incinerated frustules of diatoms settled and washed from a liter of sample. The washed sediment containing the diatoms is dried on a warming table on a number one coverglass, and this sediment is ashed in place on the coverslip on a red-hot hotplate. This method does not change the minute identification markings of the siliceous cell walls and enables the two valves (epitheca and hypotheca), as well as the groups of cells attached to one another to remain in a natural grouping, so that Sedgwick-Rafter counts and proportional counts can be matched. Permanent slide mounts are made with hyrax medium. The technique of settling, washing in distilled water and mounting does not appear to alter the uniformity of the diatom species composition. Proportional counts are made with 90-power oil immersion apochromatic objectives and 10-power oculars containing a Whipple micrometer grid. Random strip counts are made until the total number of units reaches two hundred to three hundred.

Proportional counting of diatoms from permanent slides is on a modified unit-area basis, in which each single cell or each portion of a natural aggregate occupying up to 300 square microns (μ^2) is tallied as one unit, cells or aggregates occupying from 300 to 1,000 μ^2 as two, those 1,000 to 2,500 μ^2 as three, those 2,500 to 5,000 μ^2 as four and those over 5,000 μ^2 as five. The Whipple grid makes this scaling simple. This system gives a slight weighting to the larger specimens and colonies, which are seldom numerically abundant, but it is basically the same as the Sedgwick-Rafter count used for enumerating the other phytoplankters. About 95 percent of the cells or clumps naturally fall into size class one or two.

Organic Chemicals

The Nation's water resources continue to receive increasing quantities of organic contaminants. Since 1940 the chemical industry, particularly in the manufacture of synthetic and petrochemicals, has experienced an enormous expansion that shows every sign of continuing. Each year millions of pounds of synthetic detergents, insecticides, herbicides, and similar domestic products find their way into our streams from household sewers, industrial waste discharges, and land runoff.

Effective and economical treatment methods for most of the complex organic materials remain to be developed. Even where treatment exists, residues may remain in sufficient quantity to cause water damage. These stable residues persist through sewage treatment, biological and chemical action of the stream, and water treatment processes, and finally reach the consumer in drinking water.

The presence of some of these materials, even at concentrations considerably less than 1 part per million, may impair water quality, most noticeably in production of tastes and odors. Fishflesh tainting, also quickly noticed by the consumer, is another damage. Effects on water treatment, many of which are ill-defined at present, and impairment of water quality for industrial uses are being reported with increasing frequency. Essentially nothing is known of the possible immediate or long-term effects of these materials on human health. Such information is urgently needed.

The usual sanitary analyses are not effective in measuring these newer organic contaminants. Yet it is essential to know something of their concentrations and character. A method known as the "Carbon Adsorption Technique," developed by the Public Health Service, permits the concentration of these organic compounds from a large volume of water. Elution of the adsorbed materials with organic solvents, followed by chemical separation and testing, provides useful information concerning organic pollution and for assaying river systems for these substances.

Field studies, replicate samples taken simultaneously from the same source, and subsequent replicate analysis, indicate a reproducibility for a single source, of ±10 percent. Moreover, experiments conducted in the laboratory with known solutions of organic substances indicate that adsorption efficiencies may approach 100 percent under carefully controlled conditions. However, data from many individual samples collected on different river systems strongly suggest that the adsorption efficiency may vary because of differences in the adsorbability of the particular substances present at a sampling site. The results of desorption efficiency tests run in the laboratory range from 50 to 90 percent. Therefore, comparison of results on a quantitative basis should be approached with caution.

Following continuous flow of about 5,000 gallons of water through the carbon adsorption column over a 7- to 10-day period, material on the carbon adsorption column is extracted with two solvents, chloroform and alcohol.

The extracts are weighed, and the concentration of these materials in the water sampled is then computed. Results are recorded in parts per billion (micrograms per liter). Clean waters may contain 20 to 50 ppb. of chloroform extractables and 50 to 100 ppb. of alcohol extractables. Polluted waters contain several times these concentrations.

Chloroform Extracts

The organic residue recovered from the carbon adsorption column by chloroform is very complex. It is desirable to separate the crude extract into certain broad chemical classes, and this can be done on the basis of solubility differences. The various classes or groups and their general significance are discussed briefly below.

Ether Insolubles

This group is usually a brown, humus-like powder, apparently composed to a large extent of carboxylic acids, ketones, and alcohols of complicated structure. Origin of the group, which is an indicator of "old" pollution, is believed to be partially oxidized sewage and industrial wastes. For example, the Ohio River at Cincinnati has been exposed to much industrial and sewage pollution, and hence large amounts of ether insoluble materials are found. Streams with little or no pollution history have little or no ether insolubles. Chloroform extracts contain from 0 to 30 percent of ether insoluble material.

Water Solubles

These substances are largely acidic and undistillable at moderate temperatures, but their solubility in ether indicates that the molecules are smaller and probably simpler than the ether-solubles. On the other hand, their water solubility practically requires the presence of several functional groups, such as hydroxy-acid, keto-acid, and keto-alcohol. Such compounds probably originate from partial oxidation of hydrocarbons or they may be natural substances. They have very little odor. These materials usually make up 10 to 20 percent of the total extract.

Weak Acids

This group is characterized by being removed from ether solution with sodium hydroxide but not with sodium bicarbonate. Phenols are the best known weak acids, and if present in the water, appear in this group. Other weakly acidic compounds include certain enols, imides, sulfonamides, and some sulfur compounds. This group of materials also occurs in nature. The weak acids are odorous, and commonly constitute 5 to 20 percent of the chloroform extract.

Strong Acids

These acids are usually carboxylic acids such as acetic, benzoic, salicylic or butyric. Although classified as strong in reference to carbonic acid, they are actually weak when compared with a mineral acid, such as sulfuric. Many of the compounds are used industrially, but may also be produced by natural processes, such as fermentation. Some of the materials are highly odorous. This fraction makes up from 5 to 20 percent of the total. The significance of the strong acids can be interpreted only in the light of stream pollution conditions.

Bases

These compounds are organic amines. Such materials as aniline and pyridine are amines of commerce. Lower amines may occur as a result of decomposition. Although odorous, the low concentrations found are not likely to cause objectionable conditions. However, in the case of specific amine-containing wastes the compounds can be of considerable significance. Generally, only 1 or 2 percent of the total extract is made up of the bases.

Neutrals

This group frequently constitutes the major portion of the chloroform extract. Neither basic nor acidic, the materials are less reactive and tend to persist in streams longer than many other types. Hydrocarbons, aldehydes, ketones, esters, and ethers are examples of neutral materials. The group lends itself to further fractionation by means of chromatographic separation into aliphatic, aromatic, and oxygenated subgroups:

Aliphatics: This portion represents petroleum type hydrocarbons in a considerable state of purity, and is usually made up of mineral oil type of material. The percentage of aliphatics present yields important information about the possible source of pollution, since petroleum is the most likely source.

Aromatics: These are principally the coal tar hydrocarbons such as benzene, toluene, and a host of others, and their presence in any significant amount is a reliable indication of industrial pollution. Further, the materials can frequently be identified by infrared spectrophotometry. Some aromatic compounds which have been found in our rivers—and in our drinking water—include DDT, aldrin, phyenyl ether, orthonitrochlorobenzene, pyridine, phenol, and others. The materials are highly odorous, and may also be toxic. Their appearance in any quantity as pollutants should receive careful evaluation.

Oxygenated compounds (*Oxys*): These are the neutral compounds containing oxygen, such as aldehydes, ketones, and esters. They may have originated by direct discharge or may represent oxidation products from both natural and industrial materials. They help to indicate the "age" of the pollution, since pollution exposed to oxidation forces for a long time would be expected to contain large amounts of oxys. The oxy materials are odorous.

Losses

Manipulative losses inherent in this type of separation may amount to 10 to 15 percent. Losses greater than this may indicate that volatile components were lost from the sample. Such volatiles may have significance as pollutants.

Alcohol Extracts

The alcohol extractables generally consist of materials more polar than the chloroform extractables. They often contain synthetic detergents, carboxylic acids and humic materials which may originate naturally or from oxidized products of domestic and industrial wastes. These classes of substances are not quantitatively recovered by the alcohol extraction. For example, this extraction recovers only 20 to 30 percent of the synthetic detergents present. On waters of mixed industrial and domestic pollution, the chloroform and alcohol extractables may be about equal. On some streams where the industrial pollution is rather low and much natural pollution or sewage is present, the alcohol extractables may exceed the chloroform extractables by a factor of 4 to 6.

The alcohol extract is usually only partially soluble in water and most ordinary solvents. Very little further chemical separation of this material is currently practical. However, tests have revealed that synthetic detergents may make up 1 to 12 percent of the alcohol extract.

Other Tests

Infrared spectra are routinely run on the total chloroform and alcohol extracts as well as the neutral, aliphatic, aromatic and oxygenated groups which are usually the most significant. Spectra of other groups are obtained when there is an indication that they may be significant. These spectra reveal something of the chemical structure of the materials, indicate differences and in certain instances provide a definite identification. In the case of the alcohol extracts, the infrared spectra will indicate the presence of synthetic detergents if the materials constitute a significant portion.

Composite Analysis

Samples from certain locations have been selected for analysis on a quarterly composite basis. Stations that have collected at least twelve samples in a nearly consecutive manner and averaged 100 ppb. or less of chloroform extractables are selected for such analysis when certain other conditions are met. However, samples falling in this category are analyzed individually when the recovery of the chloroform extract is exceptionally high and/or it is unusual in its infrared spectrum or some other physical characteristic.

Specific Identifications

Among the 101 stations equipped with carbon adsorption apparatuses, the Kanawha River at Winfield, W. Va., was high both singly and by station average, in carbon chloroform extractables. The highest single and station average values for alcohol extractables were found on the Ohio River at Huntington, W. Va. Samples taken on the Mississippi River at Vicksburg, Miss., recorded the lowest single and station average values for alcohol as well as chloroform extractables.

Detergents were identified in samples from 50 percent of the active stations during the year ended September 30, 1962, as contrasted with a level of 40 percent during the previous year. One of every five carbon adsorption samples contained detergent. These observations should be considered conservative since alcoholic extraction recovers only 20 to 30 percent of detergents adsorbed on the carbon during sampling.

Chlorinated hydrocarbon pesticides were found in numerous samples. (See table below.) Nitriles and amines occurred repeatedly in samples from the Potomac and Shenandoah Rivers. Nitrile compounds, forms of organic cyanide, are employed in many industrial processes. Their exact fate in watercourses and impact on aquatic life are not completely understood.

Specific Qualitative Identifications From Carbon Absorption Extracts

NWQN STA. #	RIVER	LOCATION	SAMPLE DATES	SUBSTANCE (a) IDENTIFIED
87	Shenandoah	Berryville, Va.	11/2–11/21(61)	Nitrile
87	Shenandoah	Berryville, Va.	12/5–12/18(61)	Nitrile
87	Shenandoah	Berryville, Va.	1/3–1/9(62)	Nitrile & Amine
87	Shenandoah	Berryville, Va.	1/30–2/6(62)	Nitrile & Amine
87	Shenandoah	Berryville, Va.	2/27–3/12(62)	Nitrile & Amine
87	Shenandoah	Berryville, Va.	3/27–4/3(62)	Nitrile & Amine
87	Shenandoah	Berryville, Va.	4/24–5/1(62)	Nitrile & Amine
87	Shenandoah	Berryville, Va.	6/27–7/5(62)	Nitrile & Amine
87	Shenandoah	Berryville, Va.	7/5–8/3(62)	Nitrile & Amine
87	Shenandoah	Berryville, Va.	8/7–8/15(62)	Nitrile & Amine
87	Shenandoah	Berryville, Va.	8/29–9/5(62)	Nitrile & Amine
87	Shenandoah	Berryville, Va.	9/26–10/3(62)	Nitrile & Amine
87	Shenandoah	Berryville, Va.	10/24–10/31(62)(c)	Nitrile & Amine
87	Shenandoah	Berryville, Va.	11/28–12/5(62)(c)	Nitrile & Amine
87	Shenandoah	Berryville, Va.	12/26–1/2(63)(c)	Nitrile & Amine
40	Potomac	Great Falls, Md.	10/16–10/30(61)	Nitrile
40	Potomac	Great Falls, Md.	1/8–1/29(62)	Possible Nitrile
40	Potomac	Great Falls, Md.	6/18–6/25(62)	Possible Nitrile & possible Amine
40	Potomac	Great Falls, Md.	7/16–7/25(62)	Nitrile
40	Potomac	Great Falls, Md.	8/17–8/27(62)	Nitrile
40	Potomac	Great Falls, Md.	9/17–9/26(62)	Nitrile & Amine
40	Potomac	Great Falls, Md.	10/19–10/29(62)(c)	Nitrile & Amine
40	Potomac	Great Falls, Md.	11/15–11/23(62)(c)	Nitrile & Amine
40	Potomac	Great Falls, Md.	12/4–12/18(62)(c)	Possible Nitrile
75	Susquehanna	Conowingo, Md.	8/1–8/10(62)	DDT
75	Susquehanna	Conowingo, Md.	8/30–9/7(62)	DDT
75	Susquehanna	Conowingo, Md.	10/2–10/11(62)(c)	DDT &/or DDE

Specific Qualitative Identifications From Carbon Absorption Extracts—Continued

NWQN STA. #	RIVER	LOCATION	SAMPLE DATES	SUBSTANCE (a) IDENTIFIED
75	Susquehanna	Conowingo, Md.	11/2–11/14(62)(c)	DDT
12	Delaware	Philadelphia, Pa.	5/17–5/25(62)	DDT
12	Delaware	Philadelphia, Pa.	8/20–8/27(62)	DDT
12	Delaware	Philadelphia, Pa.	10/11–10/22(62)(c)	DDT
48	Savannah	North Augusta, S.C.	5/4–5/17(62)	Dieldrin
48	Savannah	North Augusta, S.C.	7/1–7/14(62)	Dieldrin
48	Savannah	North Augusta, S.C.	8/6–8/13(62)	Dieldrin
48	Savannah	North Augusta, S.C.	10/1–10/15(62)(c)	Dieldrin
48	Savannah	North Augusta, S.C.	11/5–11/19(62)(c)	Dieldrin
120	Chattahoochee	Lanett, Ala.	9/7–9/15(62)	DDT
99	Tennessee	Pickwick Ldg., Tenn.	7/17–7/31(62)	DDT
99	Tennessee	Pickwick Ldg., Tenn.	8/14–8/28(62)	DDT
99	Tennessee	Pickwick Ldg., Tenn.	9/11–9/25(62)	DDT
99	Tennessee	Pickwick Ldg., Tenn.	10/16–10/23(62)(c)	DDT
46	Rio Grande	El Paso, Tex.	7 & 9 (62)	DDT(b)
122	San Joaquin	Vernalis, Calif.	8/29–9/11(62)	DDT
116	Sacramento	Greens Ldg., Calif.	5/23–6/8(62)	DDT
116	Sacramento	Greens Ldg., Calif.	8/9–8/30(62)	DDT
116	Sacramento	Greens Ldg., Calif.	9/5–10/9(62)	DDT
89	Yakima	Richland, Wash.	6/19–7/12(62)	DDT
89	Yakima	Richland, Wash.	8/3–9/20(62)	DDT
89	Yakima	Richland, Wash.	11/1–11/20(62)(c)	DDT
112	Colombia	Northport, Wash.	10/20–10/27(62)(c)	DDT
9	Columbia	Pasco, Wash.	10/5–10/13(62)(c)	Possible DDT
9	Columbia	Pasco, Wash.	11/3–11/10(62)(c)	DDT

(a) Identifications were made from infrared spectra of the carbon chloroform extract or one of the separated fractions.

(b) Detected in composite sample for periods 7/19–7/29(62) and 8/30–9/14(62).

(c) Included for completeness although sample date not within period covered by this volume.

Chemical, Physical, and Bacteriological Examinations

The various biochemical, chemical, physical, and bacteriological examinations generally performed by the participating laboratories are discussed below.

Ammonia Nitrogen and Chlorine Demand

The cost of water treatment for domestic use is affected by the consumption of chlorine, with ammonia nitrogen being responsible for a large portion of the chlorine demand. The greater this demand, the more expensive is the treatment. The ammonia may originate from unstabilized domestic pollution, from industrial waste discharges, from run-off containing fertilizers used in farming operations or from all three. The presence of measurable quantities of nitrogen compounds, not necessarily ammonia, is also an indication of the fertility of the stream toward both macro- and micro-biological forms.

Color

Color in domestic water supplies is undesirable. Its removal in the water treatment process, whether it be from natural or industrial sources, may require large doses of chemicals and be expensive.

Dissolved Oxygen, Biochemical and Chemical Oxygen Demands

Biochemical processes, in which aquatic organisms attack and stabilize the organic matter present, require dissolved oxygen. If unstable oxidizable organic matter is present in excess, the organisms will multiply rapidly, consuming the oxygen present in the water, and bring about a foul, septic stream condition. The dissolved oxygen level thus serves to indicate the biochemical activity of the stream. High activity, resulting in low dissolved oxygen levels, will drive out game fish in favor of scavengers. Very low or zero oxygen levels will kill all fish and aquatic organisms dependent on dissolved oxygen for life. Temperature and reaeration rates also affect dissolved oxygen levels.

The 5-day biochemical oxygen demand (BOD) indicates the degree of unstabilized organic pollution from either domestic or industrial sources, to which the stream is being subjected. A significant demand will affect the fish and macroorganism population, and waters carrying a high BOD seldom contain game fish. On the other hand, game fish will thrive in streams in which the oxygen demand has been stabilized, as this condition is usually favorable for the growth of organisms on which fish feed.

The chemical oxygen demand analysis serves to support the findings of the biochemical oxygen demand test. It too may indicate to what extent the waste load of the stream has been stabilized, or it may indicate the presence of organic and inorganic pollution which is not readily oxidized by biological processes. Because the chemical oxygen demand can be determined quickly in comparison to the biochemical oxygen demand, the establishment of a correlation between the two parameters serves to reduce the number of the latter determinations required. The chemical demand results are nearly always higher than the biochemical demand.

Temperature

Temperature is particularly important to conservation and industry. A few degrees elevation in temperature due to cooling water discharges may seriously limit the capacity of a stream to support fish life. Also, high water temperatures increase the cost of cooling water for industrial operations. Cooling towers and other equipment for handling cooling water must be engineered to the temperature levels normally encountered.

Mineral Constituents

These determinations include alkalinity, hydrogen-ion concentration (pH), hardness, chlorides, sulfates, and total dissolved solids. The pH indicates whether water is acidic or alkaline, corrosive or passive. Alkalinity is a measure of the neutralization reserve present, or the extent to which the water can resist a change from an alkaline to an acid condition upon addition of acidic chemicals. This information is important to the water treatment plant operator and to many other water users.

Hardness is not only a measure of the soap consuming property, but is also of importance in the treatment of boiler waters, where removal of hardness is one of the most important functions. Chloride, sulfate, and total dissolved solids add further information on the gross dissolved mineral content carried by the stream. These are of great importance when considering the taste or palatability of water. They are also important when the water is being demineralized for specific industrial processes, since the cost of demineralization is a direct function of the dissolved solids content of the water. In addition, waters of high saline content are less desirable and may at times even be unfit for municipal, irrigation, and other uses.

Turbidity

Turbidity of water is due to the suspension of clay, silt, finely divided organic matter, microscopic organisms, and other similar materials. Its presence is of particular importance in water treatment processes and in the propagation of fish and other aquatic life.

Coliform Organisms

Information regarding fecal pollution is essential to water quality measurements. Data on coliforms help to point up the trends in the effectiveness of control of domestic waste discharges.

The delayed incubation membrane filter technique is used for the coliform examinations, instead of the fermentation tube (MPN) method. The latter would necessitate transport of water samples to the laboratory for examination, resulting in a time lapse between collection and examination which significantly changes the microbial content of the samples. Also, some of the many other bacteria present in raw water might overgrow or otherwise inhibit the demonstration of the coliforms. In the delayed incubation membrane filter procedure, the bacterial organisms are removed from the fluid sample immediately after collection and sent to the laboratory on a preservative medium. Thus, the resulting coliform count approaches very closely the actual number of coliform bacteria present in the water sample at the time of collection.

Unusual bacterial populations which are indicative of changes in water quality and may indicate sewage pollution may be reflected in National Water Quality Network data. During the 1961–62 water year, observations of this type have been made at Sioux Falls, S. Dak., where high coliform counts were traced to a leaking force main, and at Williston, N. Dak., where earth moving operations above the water intake caused high counts.

Trace Elements and Other Determinations

This year's data include the examination of two series of composite samples of raw water from each station for the dissolved constituents likely to be present in trace quantities or whose significance does not warrant more frequent analysis. Twice during the year, 4-month composites of the weekly samples were prepared and subjected to analysis. Examinations covered those elements which were considered to have possible physiological or toxicological significance to biological life and for which a reliable method was available. As new methods are developed, other determinations will be included. The ultimate goal of this phase of the program will be to provide background data on all elements which may be found in water and which may be of significance in water quality management.

In carrying out the spectrographic examination, the sample is first passed through a membrane filter to remove all suspended matter. An aliquot of the sample is then taken, acidified with hydrochloric acid, and evaporated to a concentration containing 2 mg. of solids in 0.1 ml. of sample (20,000 ppm.). A .05-ml. portion of the concentrated sample is then placed on the electrode and arced to completion. Sample exposure is made through a stepped sector disc. The exposed plate is compared to a standard plate prepared under identical conditions.

Waters with low dissolved solids content can be concentrated to a greater degree than those having a high dissolved solids content, thus accounting for the apparently variable sensitivity shown in the tabulation. Values followed by an asterisk (*) show the limits of sensitivity at which the test was performed, and indicate that the ion being measured was not detected at that level. It is known that trace concentrations of many ions are subject to precipitation and adsorption on container surfaces during storage. This especially applies to iron and manganese which are particularly subject to oxidation and precipitation during storage. Hence, all the values reported by spectrographic method represent the quantity of the particular metal in solution at the time of analysis. It should be emphasized that the spectrographic analyses are semi-quantitative and represent an approximation of the actual value.

The measurements of potassium, sodium, fluoride, selenium and boron are performed according to flame or colorimetric procedures and are quantitative. The results, however, are rounded off to the significant figures reported.

The Cheng method, as given in Analytical Chemistry, *28*:1738(1956) was used for the selenium measurement. Fluoride examinations were made by the SPADNS procedure described by Bellack and Shouboe in Analytical Chemistry, 30:2032 (1958). Boron was measured by the curcumin procedure outlined in *Standard Methods for the Examination of Water and Wastewater*, Eleventh Edition, 1960.

Stream Flow

Stream flow data have a most important role in the utilization of water quality parameters such as are included in this report. For this reason, average daily flow records are reported for most of the sampling stations in the Network.

All flow data included in this compilation are *provisional* data furnished by the agencies credited, and are subject to revision by such agencies prior to any final publication. With the exceptions mentioned below, the flows are given as furnished to the Public Health Service.

The data were generally furnished in units of cubic feet per second. In general only the first three digits were considered significant. Because of machine limitations the data are reported here in thousand cubic feet per second. Even though three zeros may appear after the decimal, no artificial accuracy of measurement is implied. Only the first three digits should be considered significant. There are two exceptions: (1) When the flow was over 1 million cubic feet per second, the first four digits are reported, and (2) at times when the Rio Grande flows were extremely low, the data were reported to tenths of a cubic foot per second. These figures are published showing 4 decimal places.

Flow data for sampling stations on the rivers of the Great Lakes system are reported as the monthly mean flow, as computed by the U.S. Lake Survey. In certain other rivers, flow data were computed by the Public Health Service from information supplied by the gauging agency. The methods of computations are shown as footnotes to the data for the applicable stations.

STATION	MILES ABOVE MOUTH	DESCRIPTION	SAMPLED BY	FIELD ANALYSES BY	OTHER COOPERATING AGENCIES	STREAM FLOW RECORDS		
						NEAREST GAGING STATION	OPERATED BY	PERIOD OF RECORD
ALLEGHENY RIVER at Pittsburgh, Pa.	8	Pittsburgh Filtration Plant Intake	Pittsburgh Dept. of Water	Pittsburgh Dept. of Water	Pennsylvania Dept. of Health	Natrona, Pa.	U.S. Geological Survey	1938 to date
ANIMAS RIVER at Cedar Hill, N. Mex.	33	Heiser Ranch at natural gas pipeline crossing	San Juan County Health Dept.	San Juan County Health Dept.	New Mexico Dept. of Public Health	near Cedar Hill, N. Mex.	U.S. Geological Survey	1936 to date
APALACHICOLA RIVER at Chattahoochee, Fla.	105	Jim Woodruff Dam Powerhouse	U.S. Army Corps of Engineers Florida State Hospital Chattahoochee, Fla.	Florida State Hospital	Florida State Board of Health	Chattahoochee, Fla.	U.S. Geological Survey	1928 to date
ARKANSAS RIVER at Pendleton Ferry, Ark.	45	Ferry Landing, South Shore	Arkansas State Water Pollution Control Commission	Arkansas State Water Pollution Control Commission	Arkansas State Board of Health	Little Rock, Arkansas	U.S. Geological Survey	1927 to date
near Ponca City, Okla.	646	Old U.S. Highway No.60 Bridge (formerly at Osage Station, Okla. Gas & Electric Co.)	Ponca City Water Dept.	Ponca City Water Dept. U.S. Public Health Service	Oklahoma State Dept. of Health	Ralston, Oklahoma	U.S. Geological Survey	1938 to date
at Coolidge, Kansas	1,099	U.S. Geological Survey Stream Gaging Station	U.S. Geological Survey	U.S. Public Health Service	Kansas State Board of Health Colorado State Dept. of Health	near Coolidge, Kansas	U.S. Geological Survey	1903, 1921 1950 to date
BEAR RIVER above Preston, Idaho	87	at U.S. Highway 91 Bridge	Franklin County, Idaho Health Dept.	U.S. Public Health Service	Idaho State Dept. of Health Idaho State Highway Dept.	Preston, Idaho	U.S. Geological Survey	1943 to date
BIG HORN RIVER at Hardin, Montana	40	at Water Plant Intake	Hardin Water Dept.	Hardin Water Dept.	Montana Dept. of Health	St. Xavier, Montana	U.S. Geological Survey	1934 to date
BIG SIOUX RIVER below Sioux Falls, S.D.	158	1st bridge east of U.S. Hwy. #229 below Sioux Falls	Sioux Falls Sewage Treatment Plant	Sioux Falls Sewage Treatment Plant	South Dakota Dept. of Health	Brandon, S. D.	U.S. Geological Survey	1959 to date
CHATTAHOOCHEE RIVER at Columbus, Georgia	160	Columbus Water Dept. Plant Intake	Columbus Water Dept.	Columbus Water Dept.	Georgia Dept. of Public Health	Columbus, Georgia	U.S. Geological Survey	1929 to date
at Lanett, Alabama	192	West Point Manufacturing Co. Water Filter Plant Intake	West Point Manufacturing Company	West Point Manufacturing Company	Alabama State Dept. of Health Alabama Water Improvement Commission	West Point, Georgia	U.S. Geological Survey	1896-1910 1912 to date

STATION	MILES ABOVE MOUTH	DESCRIPTION	SAMPLED BY	FIELD ANALYSES BY	OTHER COOPERATING AGENCIES	STREAM FLOW RECORDS		
						NEAREST GAGING STATION	OPERATED BY	PERIOD OF RECORD
CHATTAHOOCHEE RIVER (Cont'd) at Atlanta, Georgia	303	Atlanta Water Dept. Plant Intake	Atlanta Water Dept.	Atlanta Water Dept.	Georgia Dept. of Public Health	Atlanta, Georgia	U.S. Geological Survey	1928, 1931 1936 to date
CHENA SLOUGH at Fairbanks, Alaska	15	at Ft. Wainwright Sewage Pump Plant	Fairbanks Municipal Utilities System	Fairbanks Municipal Utilities System	Alaska State Dept. of Health and Welfare U.S. Army	Fairbanks, Alaska	U.S. Geological Survey	1947 to date
CLEARWATER RIVER at Lewiston, Idaho	2	Water Plant Intake	Lewiston Water Dept.	Lewiston Water Dept.	Idaho Dept. of Health	Spalding, Idaho	Washington Water Power Company	1926 to date
CLINCH RIVER at Clinton, Tenn.	36	Water Plant Intake	Clinton Water Dept.	Clinton Water Dept.	Tennessee Dept. of Public Health	below Norris Dam	U.S. Geological Survey	1903 to date
above Kingston, Tenn.	14	at Gaseous Diffusion Plant Water Intake	Clinch River Study Commission	U.S. Public Health Service	Tennessee Dept. of Public Health Tennessee Stream Pollution Control Commission	near Scarboro, Tennessee	U.S. Geological Survey	1941 to date
COLORADO RIVER at Yuma, Arizona	91	Arizona Water Co. Intake	Arizona Water Co.	Arizona Water Co.	Arizona State Dept. of Health	below Yuma, Arizona	U.S. Geological Survey	1878 to date
above Parker Dam, Arizona-California	258	Aqueduct Intake, Metropolitan Water District of Southern California	Metropolitan Water District of Southern California	Metropolitan Water Distr. of Southern California U.S. Public Health Service	California State Dept. of Health California State Water Pollution Control Board	below Parker Dam	U.S. Geological Survey	1934 to date
near Boulder City, Nevada	413	Boulder City (Nevada) Water Plant Intake	Boulder City Water Dept.	Boulder City Water Dept.	Nevada State Dept. of Public Health U.S. Bureau of Reclamation	below Hoover Dam	through U.S. Geological Survey U.S. Bureau of Reclamation	1935 to date
at Page, Arizona	775	Page Water Plant Intake	U.S. Bureau of Reclamation	U.S. Bureau of Reclamation	Arizona State Dept. of Health Utah State Dept. of Health	Lees Ferry, Arizona	U.S. Geological Survey	1911 to date
at Loma, Colorado	1,150	Pumping Station at E. R. Smith Farm	Mesa County (Colorado) Dept. of Public Health	Grand Junction (Colorado) Water Dept.	Colorado State Dept. of Public Health	near Colorado-Utah State Line	U.S. Geological Survey	1951 to date

STATION	MILES ABOVE MOUTH	DESCRIPTION	SAMPLED BY	FIELD ANALYSES BY	OTHER COOPERATING AGENCIES	STREAM FLOW RECORDS		
						NEAREST GAGING STATION	OPERATED BY	PERIOD OF RECORD
COLUMBIA RIVER at Clatskanie, Oregon	53	Beaver Army Terminal U.S. Army Transp., Supply & Maintenance Command	U.S. Army U.S. Public Health Service	Oregon State Sanitary Authority U.S. Public Health Service		Clatskanie, Oregon*	U.S. Geological Survey	1926 to date
at Bonneville, Oregon	145	Bonneville Dam Powerhouse	U.S. Army Corps of Engineers	Crown Zellerbach Corp.	Oregon State Sanitary Authority Washington State Dept. of Health Washington State Pollution Control Commission	Bonneville, Oregon*	U.S. Geological Survey	1928 to date
at McNary Dam, Oregon	292	U.S. Army Engineer Project McNary Dam	U.S. Corps of Engineers Washington State Pollution Control Commission	U.S. Geological Survey	Washington State Dept. of Health	below McNary Dam, Oregon	U.S. Geological Survey	1951 to date
at Pasco, Washington	327	Municipal Water Plant Intake	Pasco Water Dept.	Pasco Water Dept.	Washington State Dept. of Health Washington State Pollution Control Commission	Pasco, Washington*	U.S. Geological Survey	1933 to date
at Wenatchee, Wash.	465	Plant Intake, Aluminum Co. of America	Aluminum Co. of America	Aluminum Co. of America	Washington State Dept. of Health Washington State Pollution Control Commission	Trinidad, Washington	U.S. Geological Survey	1913 to date
at Northport, Wash.	730	Washington State Highway #22 Bridge (carbon adsorption unit on East Bank - four miles downstream)	Interested citizens	U.S. Public Health Service	Washington State Dept. of Health Washington State Pollution Control Commission	International Boundary	U.S. Geological Survey	1937 to date
CONNECTICUT RIVER below Northfield, Mass.	138	Central Vermont R.R. Bridge	Massachusetts State Dept. of Public Health	Massachusetts State Dept. of Public Health (Amherst Laboratory)		Vernon, Vermont*	U.S. Geological Survey	1936, 1938 1944 to date
at Enfield Dam, Conn.	63	on Windsor Lock at Dam	Connecticut Water Resources Commission	Connecticut Water Resources Commission	Connecticut Light and Power Company Wesleyan University	Thompsonville, Conn.	U.S. Geological Survey	1928 to date
at Wilder, Vermont	186	at Wilder Dam Power Plant	New England Power Company	U.S. Public Health Service	New Hampshire State Water Pollution Control Commission Vermont Dept. of Water Resources	Connecticut River at White River Junction, Vt. White River at West Hartford, Vt.	U.S. Geological Survey	1911 to date 1915 to date
CUMBERLAND RIVER at Clarksville, Tenn.	120	Clarksville Water Treatment Plant Intake	Clarksville Gas & Water Dept.	Clarksville Gas & Water Dept.	Tennessee Dept. of Public Health	Dover, Tennessee	U.S. Geological Survey	1939 to date

*Computed Data

STATION	MILES ABOVE MOUTH	DESCRIPTION	SAMPLED BY	FIELD ANALYSES BY	OTHER COOPERATING AGENCIES	STREAM FLOW RECORDS		
						NEAREST GAGING STATION	OPERATED BY	PERIOD OF RECORD
DELAWARE RIVER at Philadelphia, Pa.	110	Municipal Water Plant Intake (Torresdale Plant)	Philadelphia Water Dept.	Philadelphia Water Dept.	Pennsylvania State Dept. of Health	Trenton, New Jersey	U.S. Geological Survey	1913 to date
at Trenton, N. J.	136	Water Works Intake	Trenton Water Department	Trenton Water Department	New Jersey Dept. of Public Health	Trenton Water Works Intake	U.S. Geological Survey	1913 to date
at Martins Creek, Pa.	191	at Martins Creek Steam Electric Station	Pennsylvania Power & Light Company	Pennsylvania Power & Light Company	Pennsylvania State Dept. of Health	Belvidere, New Jersey	U.S. Geological Survey	1922 to date
ESCAMBIA RIVER at Century, Florida	51	Highway Bridge on State Route #4	Florida State Board of Health	Florida State Board of Health		near Century, Florida	U.S. Geological Survey	1934 to date
GREAT LAKES Lake Erie at Buffalo, New York		Municipal Water Plant Intake	Buffalo Water Dept. Erie County (N.Y.) Health Dept.	Erie County (N.Y.) Health Dept.	New York State Dept. of Health	Cleveland, Ohio (Water Stages only)	U.S. Lake Survey	1900 to date
Detroit River at Detroit, Michigan	29	Municipal Water Plant Intake (Water Works Park)	Detroit Board of Water Commissioners	Detroit Board of Water Commissioners	Michigan State Dept. of Health Michigan State Water Resources Commission	Detroit, Michigan	U.S. Lake Survey	1936 to date
St. Clair River at Port Huron, Michigan	38	Municipal Water Plant Intake	City of Port Huron, Mich.	City of Port Huron, Mich.	Michigan State Dept. of Health International Joint Commission Michigan State Water Resources Board	Ft. Gratiot, Michigan	U.S. Lake Survey	1900 to date
Lake Michigan at Gary, Indiana	-	Gary-Hobart Water Corp. Intake	Gary-Hobart Water Corp.	Gary-Hobart Water Corp.	Indiana State Board of Health	Milwaukee, Wisconsin (Water Stages only)	U.S. Lake Survey	1905 to date
Lake Michigan at Milwaukee, Wisconsin	-	Muncipal Water Plant Intake	City of Milwaukee, Wisc.	City of Milwaukee, Wisc.	Wisconsin State Board of Health	Milwaukee, Wisconsin	U.S. Lake Survey	1860 to date
St. Marys River at Sault Ste. Marie, Michigan	48	Municipal Water Plant Intake	Sault Ste. Marie Water Dept.	Sault Ste. Marie Water Dept.	Michigan State Dept. of Health	Sault Ste. Marie, Mich.	U.S. Lake Survey	1900 to date
Lake Superior at Duluth, Minnesota	-	Municipal Water Plant Intake	Duluth Water, Gas & Sewage Treatment Dept.	Duluth Water, Gas & Sewage Treatment Dept.	Minnesota State Dept. of Health	Marquette, Michigan	U.S. Lake Survey	1900 to date
GREEN RIVER at Dutch John, Utah	403	below Flaming Gorge Dam	U.S. Bureau of Reclamation	U.S. Public Health Service	Utah Water Pollution Control Board	near Greendale, Utah	U.S. Geological Survey	1942 to date
HUDSON RIVER below Poughkeepsie, New York	70 (est.)	International Business Machine Corp. Plant Intake	International Business Machine Corp.	International Business Machine Corp. New York State Dept. of Health	New York State Dept. of Health	Green Island, New York	U.S. Geological Survey	1946 to date

STATION	MILES ABOVE MOUTH	DESCRIPTION	SAMPLED BY	FIELD ANALYSES BY	OTHER COOPERATING AGENCIES	STREAM FLOW RECORDS		
						NEAREST GAGING STATION	OPERATED BY	PERIOD OF RECORD
ILLINOIS RIVER near Grafton, Illinois	10	at Pere Marquette State Park Water Pump House	Illinois Department of Conservation	U.S. Public Health Service	Illinois Dept. of Public Health	Meredosia, Illinois	U.S. Geological Survey	1938 to date
at Peoria, Illinois	166	Peoria Water Works Company Plant Intake	Peoria Water Works Company	Peoria Water Works Co.	Illinois Dept. of Public Health	Kingston Mines, Illinois	U.S. Geological Survey	1939 to date
KANAWHA RIVER at Winfield Dam, West Virginia	30	Winfield Dam Power Plant	West Virginia Water Resources Commission	West Virginia Water Resources Commission	Kanawha Valley Power Co. West Virginia State Dept. of Health	Charleston, West Virginia	U.S. Geological Survey	1939 to date
KLAMATH RIVER near Keno, Oregon	220	below Big Bend Plant of California-Oregon Power Co.	California Oregon Power Co. City of Klamath Falls, Oregon Klamath County Health Dept.	Klamath Falls Sewage Treatment Plant	Oregon State Board of Health	below Big Bend Power Plant near Keno, Oregon	U.S. Geological Survey	1904-1913 1930 to date
LITTLE MIAMI RIVER at Cincinnati, Ohio	2	at Beechmont Levee and U.S. State Highway #125	U.S. Public Health Service	U.S. Public Health Service	City of Cincinnati, Ohio Ohio Dept. of Health	Milford, Ohio	U.S. Geological Survey	1915 to date
MERRIMACK RIVER above Lowell, Mass.	42	Old Municipal Water Plant Intake	Lowell Water Dept.	Massachusetts State Dept. of Health (Lawrence Experiment Station)		below Concord River at Lowell, Massachusetts	U.S. Geological Survey	1923 to date
MISSISSIPPI RIVER at New Orleans, La.	105	Municipal Water Plant Intake	New Orleans Sewage and Water Board	Louisiana State Dept. of Health	Louisiana State Dept. of Health	Red River Landing, La.	U.S. Geological Survey	1928 to date
at Vicksburg, Miss.	431	Municipal Water Plant Intake	Vicksburg Water Dept.	Vicksburg Water Dept.	La. State Dept. of Health Miss. State Bd. of Health	Vicksburg, Mississippi	U.S. Geological Survey	1931 to date
at Delta, Louisiana	433	River Landing, Delta Casting Yard, U.S. Corps of Engineers	Mississippi State Board of Health	Mississippi State Board of Health	Louisiana State Dept. of Health	Vicksburg, Mississippi	U.S. Geological Survey	1931 to date
at West Memphis, Ark.	726	Barge Terminal, Oklahoma-Mississippi River Products Lines, Inc.	Memphis (Tennessee) Light, Gas & Water Division	Memphis (Tennessee) Light, Gas & Water Division	Arkansas State Board of Health Tennessee Dept. of Public Health	Memphis, Tennessee	U.S. Geological Survey	1934 to date
at Cape Girardeau, Mo.	1,020	Missouri Utilities Co. Water Intake	Missouri Utilities Co.	Missouri Utilities Co.	Missouri Dept. of Public Health Missouri Water Pollution Board	Thebes, Illinois	U.S. Geological Survey	1933-1938 1939 to date
at East St. Louis, Ill.	1,166	East St. Louis Water Co. Intake	East St. Louis Water Co.	East St. Louis Water Co.	Illinois State Dept. of Public Health	Alton, Illinois	U.S. Geological Survey	1933-1938 1939 to date
at Burlington, Iowa	1,369	Municipal Water Plant Intake	Burlington Water Dept.	Burlington Water Dept.	Iowa State Dept. of Health	Keokuk, Iowa	U.S. Geological Survey	1878 to date

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						NEAREST GAGING STATION	OPERATED BY	PERIOD OF RECORD
MISSISSIPPI RIVER (Cont'd) at Dubuque, Iowa	1,549	U.S. Army Corps of Engineers Lock & Dam #11	Dubuque Water Dept.	Dubuque Water Dept.	Iowa State Dept. of Health	McGregor, Iowa	U.S. Geological Survey	1936 to date
Lock & Dam #3 below St. Paul, Minn.	1,757	U.S. Army Corps of Engineers Lock & Dam #3	U.S. Army Corps of Engineers, Minneapolis-St. Paul Sanitary Distr.	Minneapolis-St. Paul Sanitary District	Minnesota State Dept. of Health	Prescott, Wisconsin	U.S. Geological Survey	1928 to date
MISSOURI RIVER at St. Louis, Missouri	36	Water Plant Intake, St. Louis County Water Co. and Howard Bend Plant, City of St. Louis	St. Louis County Water Company St. Louis Water Dept.	St. Louis County Water Company St. Louis Water Dept.	Missouri Dept. of Public Health Missouri Water Pollution Board	Hermann, Missouri	U.S. Geological Survey	1897 to date
at Missouri City, Missouri	351	North West Electric Power Coop. Power Plant Intake	North West Electric Power Coop., Inc.	U.S. Public Health Service	Missouri Water Pollution Board Missouri Dept. of Public Health	Kansas City, Missouri	U.S. Geological Survey	1897 to date
at Kansas City, Kansas	385	Municipal Water Plant Intake	Kansas City (Kansas) Board of Public Utilities	Kansas City (Kansas) Board of Public Utilities	Kansas State Board of Health	Kansas City, Missouri*	U.S. Geological Survey	1897 to date
at St. Joseph, Missouri	471	St. Joseph Water Co. Intake	St. Joseph Water Co.	St. Joseph Water Co.	Missouri Dept. of Public Health Missouri Water Pollution Board	St. Joseph, Missouri	U.S. Geological Survey	1927 to date
at Omaha, Nebraska	642	Metropolitan Utilities Distr. Water Plant Intake	Metropolitan Utilities District	Metropolitan Utilities District	Nebraska State Dept. of Health	Omaha, Nebraska	U.S. Geological Survey	1928 to date
at Yankton, South Dakota	841	Municipal Water Plant Intake	Yankton Water Dept.	Yankton Water Dept.	South Dakota State Board of Health	Yankton, South Dakota	U.S. Geological Survey	1930 to date
at Bismarck, North Dakota	1,377	Municipal Water Plant Intake	Bismarck Water Dept.	Bismarck Water Dept. North Dakota State Dept. of Health		Bismarck, North Dakota	U.S. Geological Survey	1927 to date
at Williston, North Dakota	1,644	Municipal Water Plant Intake	Williston Water Dept.	Williston Water Dept.	North Dakota State Dept. of Health	near Williston, North Dakota	U.S. Geological Survey	1928 to date
MONONGAHELA RIVER at Pittsburgh, Pa.	4	Hayes Mine Filter Plant	South Pittsburgh Water Co.	South Pittsburgh Water Co.	Pennsylvania State Dept. of Health	Braddock, Pa.	U.S. Geological Survey	1938 to date
NORTH PLATTE RIVER above Henry, Nebraska	182 (est.)	Nebraska State Highway #86 Bridge near Scottsbluff	West Nebraska Branch Lab. of Nebraska State Dept. of Health	West Nebraska Branch Laboratory of the Nebraska State Dept. of Health		Wyoming-Nebraska State Line	U.S. Geological Survey	1929 to date

*Computed Data

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						NEAREST GAGING STATION	OPERATED BY	PERIOD OF RECORD
OHIO RIVER at Cairo, Illinois	3	Cairo Water Co. Intake	Cairo Water Co.	Cairo Water Co.	Illinois State Dept. of Public Health	Metropolis, Illinois	U.S. Geological Survey	1934 to date
at Evansville, Indiana	190	Municipal Water Plant Intake	Evansville Water Dept.	Evansville Water Dept.	Indiana State Board of Health	Evansville, Indiana	U.S. Geological Survey	1936 to date
at Louisville, Kentucky	370	Louisville Water Co. Filter Plant Intake	Louisville Water Co.	Louisville Water Co.		Louisville, Kentucky	U.S. Geological Survey	1928 to date
at Cincinnati, Ohio	518	Municipal Water Plant Intake	Cincinnati Water Dept.	Cincinnati Water Dept.	Ohio State Dept. of Health	Cincinnati, Ohio	U.S. Geological Survey	1936 to date
at Huntington, West Virginia	677	Huntington Water Corp. Intake	Huntington Water Corp.	Huntington Water Corp.	West Virginia State Dept. of Health	Huntington, West Virginia	U.S. Geological Survey	1934 to date
below Addison, Ohio	723	Kyger Creek Plant of Ohio Valley Electric Corp.	Ohio Valley Electric Corp.	Ohio Valley Electric Corp.	Ohio Department of Health	Pomeroy, Ohio	U.S. Geological Survey	1955 to date
at East Liverpool, Ohio	941	Municipal Water Plant Intake	East Liverpool Water Dept.	East Liverpool Water Dept.	Ohio State Dept. of Health	Sewickley, Pennsylvania	U.S. Geological Survey	1933 to date
OUACHITA RIVER at Bastrop, Louisiana	215	River Bank Seven Miles west of Bastrop, La.	Louisiana Wildlife & Fisheries Commission	Louisiana Wildlife & Fisheries Commission	Louisiana Stream Control Commission Louisiana State Board of Health	near Arkansas-Louisiana State Line	U.S. Geological Survey	1958 to date
PEND OREILLE RIVER at Albeni Falls Dam, Idaho	90	Albeni Falls Dam Power House	U.S. Army Corps of Engineers	U.S. Public Health Service	Washington State Dept. of Health Idaho State Board of Health	at Newport, Washington	U.S. Geological Survey	1903-1941 1952 to date
PLATTE RIVER above Plattsmouth, Nebraska	2	at U.S. Highway #73 Bridge	Nebraska State Dept. of Health City of Plattsmouth	Nebraska State Dept. of Health		South Bend, Nebraska	U.S. Geological Survey	1953 to date
POTOMAC RIVER at Great Falls, Md.	126	Washington, D.C. Water Plant Intake	U.S. Army Corps of Engineers	U.S. Army Corps of Engineers	Maryland State Dept. of Health	near Washington, D.C.	U.S. Geological Survey	1930 to date
at Williamsport, Md.	212	Hagerstown Municipal Water Plant Intake	Hagerstown Water Dept.	Hagerstown Water Dept.	Maryland State Dept. of Health	Williamsport, Maryland *	U.S. Geological Survey	1928 to date
RAINY RIVER at International Falls, Minnesota	70	Minnesota & Ontario Paper Company Water Intake	Minnesota & Ontario Paper Company	Minnesota & Ontario Paper Company	Minnesota State Dept. of Health	International Falls, Minnesota	International Joint Commission	1942 to date
at Baudette, Minnesota	9	Intake at east end of wooden pier of Canadian National Railroad Bridge	Baudette Light & Power Dept.	U.S. Public Health Service	Minnesota State Dept. of Health	Manitou Rapids, Minnesota	U.S. Geological Survey	July, 1928 to date

*Computed Data

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RARITAN RIVER at Perth Amboy, N. J.	2	New Jersey Highway #35 Bridge	U.S. Public Health Service	U.S. Public Health Service	New Jersey Dept. of Health	Bound Brook, New Jersey	U.S. Geological Survey	1903-1909 1945 to date
RED RIVER (North) at Grand Forks, North Dakota	296	Municipal Water Plant Intake	Grand Forks City Water Dept.	Grand Forks City Water Dept.	North Dakota State Dept. of Health	Grand Forks, North Dakota	U.S. Geological Survey	1901-1957
RED RIVER (South) at Alexandria, Louisiana	122	on pier of Alexandria-Pineville Expressway Bridge	Alexandria Water Dept.	Louisiana State Dept. of Health, Alexandria Laboratory	Louisiana State Dept. of Health	Alexandria, Louisiana	Mississippi River Comm. U.S. Army Corps of Engineers	1928-1938 1938 to date
at Bossier City, La.	312	at Water Plant Intake	Bossier City Water Department	Bossier City Water Department	Louisiana State Board of Health Louisiana Stream Control Commission	Shreveport, Louisiana	U.S. Geological Survey	1928 to date
at Index, Arkansas	485	U.S. Highway #71 Bridge	U.S. Public Health Service Arkansas State Water Pollution Control Commission	Arkansas State Water Pollution Control Commission	Arkansas State Board of Health	Index, Arkansas	U.S. Geological Survey	1936 to date
at Denison, Texas	726	Denison Dam Power House	U.S. Army Corps of Engineers	Denison Water Dept.	Texas State Dept. of Health	Colbert, Oklahoma	U.S. Army Corps of Engineers	1923 to date
RIO GRANDE at Brownsville, Texas	40	Brownsville Filtration Plant Plant #1 Intake	Brownsville Water Dept.	Brownsville Water Dept.	Texas State Dept. of Health	Lower Brownsville, Texas *	International Boundary & Water Commission	1934 to date
at Laredo, Texas	356	Municipal Water Plant Intake	Laredo Water Dept.	Laredo Water Dept.	Texas State Dept. of Health	Laredo, Texas	International Boundary &Water Commission	1923 to date
at El Paso, Texas	1,234	Municipal Water Plant Intake	El Paso Public Service Board	El Paso Public Service Board	Texas State Dept. of Health	below Caballo Dam, New Mexico	U.S. Bureau of Reclamation	1938 to date
below Alamosa, Colo.	1,755	below Alamosa at State Highway #142 Bridge	Colorado State Dept. of Public Health	Colorado State Dept. of Public Health		near Lobatos, Colorado	U.S. Geological Survey	1953 to date
ROANOKE RIVER at John H. Kerr Reservoir & Dam, Virginia	151	at John H. Kerr Dam and Reservoir	U.S. Army Corps of Engineers	U.S. Army Corps of Engineers	Virginia State Water Control Board	Buggs Island, Virginia	U.S. Geological Survey	1953 to date
SABINE RIVER near Ruliff, Texas	40	Sabine River Authority Pumping Plant	Sabine River Authority	U.S. Public Health Service	U.S. Geological Survey Texas State Dept. of Health	near Ruliff, Texas	U.S. Geological Survey	1924 to date

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						NEAREST GAGING STATION	OPERATED BY	PERIOD OF RECORD
SACRAMENTO RIVER at Green's Landing above Courtland, Calif.	31	Bureau of Reclamation Instrument House	California Department of Water Resources	California Department of Water Resources	California State Department of Health	Snodgrass Slough	California Department of Water Resources	1939 to date
ST. LAWRENCE RIVER at Massena, New York	422	Aluminum Foundry Plant Intake	Chevrolet Motor Div. General Motors Corp. Aluminum Foundry	Chevrolet Motor Div. General Motors Corp. Aluminum Foundry	New York State Dept. of Health	International Rapids Section (St. Lawrence Power Pool)	U.S. Army Corps of Engineers	1860 to date
SAN JOAQUIN RIVER near Vernalis Calif.	67	Bureau of Reclamation Instrument House	California Department of Water Resources	California Department of Water Resources	California State Department of Health	Vernalis, California	U.S. Geological Survey	1922 to date
SAN JUAN RIVER at Shiprock, New Mexico	208	at U.S. Bureau of Mines Helium Plant Water Intake	San Juan County Health Dept.	San Juan County Health Dept.	New Mexico Dept. of Public Health	Shiprock, New Mexico	U.S. Geological Survey	1912 to date
SAVANNAH RIVER at Fort Wentworth, Georgia	22	State Highway #17 Bridge	U. S. Army Corps of Engineers	Union Bag-Camp Paper Co.	Chatham County, Georgia, Health Department Ga. State Dept. of Public Health	near Clyo, Georgia	U.S. Geological Survey	1930, 1933 1937 to date
at North Augusta, South Carolina	217	Municipal Water Plant Intake	North Augusta Water Dept.	North Augusta Water Dept.	South Carolina State Dept. of Health	Augusta, Georgia	U.S. Geological Survey	1896-1906 1927-1931 1938 to date
SCHUYLKILL RIVER at Philadelphia, Pa.	10	Municipal Water Plant Intake	Philadelphia Water Dept.	Philadelphia Water Dept.	Pennsylvania Dept. of Health	Philadelphia, Pennsylvania	U.S. Geological Survey	1931 to date
SHENANDOAH RIVER at Berryville, Virginia	22	Corps of Engineers Pumping Station near Berryville, Virginia	U.S. Army Corps of Engineers	U.S. Army Corps of Engineers	Virginia State Water Control Board	Millville, West Virginia	U.S. Geological Survey	1928 to date
SHIP CREEK at Anchorage, Alaska	11	City of Anchorage Water Treatment Plant	Greater Anchorage Health District	U.S. Public Health Service	Alaska Department of Health and Welfare	Anchorage, Alaska	U.S. Geological Survey	1956 to date
SNAKE RIVER at Ice Harbor Dam, Wash.	12	at Ice Harbor Dam Power Plant	U.S. Army Corps of Engineers	U.S. Public Health Service	Washington State Department of Health Washington State Pollution Control Commission	near Clarkston, Washington	U.S. Geological Survey	1915 to date

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						NEAREST GAGING STATION	OPERATED BY	PERIOD OF RECORD
SNAKE RIVER (Cont'd) at Wawawai, Washington	111 (est.)	Pumping station at I.E. Wilson Farm	Washington State University	Washington State University	Washington State Dept. of Health	near Clarkston, Washington	U.S. Geological Survey	1915 to date
at Payette, Idaho	368	Water Plant Intake	Payette Water Department	Idaho State Dept. of Health	Idaho State Dept. of Health	Weiser, Idaho	U.S. Geological Survey	1911 to date
SOUTH PLATTE RIVER at Julesburg, Colorado	87	at Julesburg Sewage Treatment Plant	Northeast Colorado Health Dept.	Northeast Colorado Health Dept.	Colorado State Dept. of Health	Julesburg, Colorado	State of Colorado Dept. of Water Resources	1902-1906 1908-1921 1925 to date
SPOKANE RIVER at Post Falls Dam, Idaho	94	at Post Falls Dam Power Plant	Washington Water Power Company	U.S. Public Health Service	Washington State Dept. of Health Idaho State Dept. of Health	Post Falls, Idaho	U.S. Geological Survey	1913 to date
SUSQUEHANNA RIVER at Conowingo, Maryland	10	Conowingo Hydro Electric Plant, Conowingo Dam	Baltimore Bureau of Water Supply Philadelphia Electric Co.	Baltimore Bureau of Water Supply	Maryland State Dept. of Health	Marietta, Pennsylvania	U.S. Geological Survey	1931 to date
at Sayre, Pennsylvania	286	Sayre Water Co. Plant Intake	Sayre Water Company	Sayre Water Company	Pennsylvania Dept. of Health	near Waverly, New York	U.S. Geological Survey	1937 to date
TENNESSEE RIVER at Pickwick Landing, Tennessee	207	at Pickwick Landing Dam Power House	Hardin County, Tennessee Health Department	U.S. Public Health Service	Tennessee Stream Pollution Control Commission Tennessee Dept. of Public Health	Savannah, Tennessee	Tennessee Valley Authority	1930 to date
at Bridgeport, Alabama	408	at TVA Widows Creek Steam Electric Plant	Stream Pollution Control Section Tennessee Valley Authority	TVA Stream Pollution Laboratory		Hales Bar, near Chattanooga, Tenn.	U.S. Geological Survey	1930 to date
at Chattanooga, Tennessee	467 (est.)	City Water Company Intake	City Water Company of Chattanooga	City Water Company of Chattanooga Tennessee Valley Authority	Tennessee Dept. of Public Health	Chattanooga, Tennessee	U.S. Geological Survey	1874-1913 1915-1930 1936 to date
at Lenoir City, Tenn.	565	at Pumphouse Intake	Lenoir City Water Utilities Board	Lenoir City Water Utilities Board	Tennessee Dept. of Public Health Tennessee Stream Pollution Control Commission	Ft. Loudon Dam, Tenn. Little Tennessee River near McGee, Tenn.	Tennessee Valley Authority	1943 to date 1904 to date
TOMBIGBEE RIVER below Columbus, Mississippi	368	at YMCA Camp Pratt, 11 miles south of Columbus, Miss.	Lowndes County Health Dept.	Lowndes County Health Dept.	Mississippi State Board of Health	Columbus, Mississippi Steens, Mississippi	U.S. Geological Survey U.S. Geological Survey	1918 to date 1939 to date

STATION	MILES ABOVE MOUTH	DESCRIPTION	SAMPLED BY	FIELD ANALYSES BY	OTHER COOPERATING AGENCIES	STREAM FLOW RECORDS		
						NEAREST GAGING STATION	OPERATED BY	PERIOD OF RECORD
TRUCKEE RIVER at Farad, California below California-Nevada Border	82	at Farad Power Station of Sierra Pacific Power Co.	California Dept. of Water Resources Nevada County, California, Health Department	California Department of Water Resources	Sierra Pacific Power Co. California Dept. of Public Health	Farad, California	U.S. Geological Survey	1900-1909 1938 to date
VERDIGRIS RIVER at Nowata, Okla.	150	Water Plant Intake	Nowata Water Department	Nowata Water Department	Oklahoma State Dept. of Health	Lenapah, Oklahoma	U.S. Army Corps of Engineers	1939 to date
WABASH RIVER at New Harmony, Ind.	52	U.S. Highway #460 Bridge	White County, Illinois, Bridge Commission Indiana State Board of Health	Indiana State Board of Health		Mount Carmel, Illinois	U.S. Geological Survey	1927 to date
WILLAMETTE RIVER at Portland, Oregon	8	at Swan Island in Portland Harbor	U.S. Public Health Service	U.S. Public Health Service	Oregon State Board of Health	Salem, Oregon	U.S. Geological Survey	1909 to date
YAKIMA RIVER at Richland, Washington	5	Richland Municipal Water Intake	City of Richland, Washington	Richland Water Dept.	Washington State Board of Health Washington Pollution Control Commission	Kiona, Washington	U.S. Geological Survey	1896-1915 1933-1950 1959 to date
YELLOWSTONE RIVER near Sidney, Montana	30	Intake - Lewis & Clark Station, Montana-Dakota Utilities Co	Montana-Dakota Utilities Company	Montana-Dakota Utilities Company	Montana State Board of Health	near Sidney, Montana	U.S. Geological Survey	1934 to date

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Explanation of Analytical Data

Radioactivity Determinations

In evaluating radioactivity data it should be noted that the reported errors represent counting errors only and the reported values are subject to other errors commonly associated with gross radioactivity analysis. (See Reference 17.)

A dash (—) in the count column signifies that no determination was made. An asterisk (*) following date of sample indicates that determinations are for composites of two or more samples taken on and before the date shown.

Strontium 90 determinations are reported in micromicrocuries per liter as measured from total solids in the sample composited for the quarter. A dash (—) indicates that no determination was made in that period.

Plankton Population

Plankton data are reported on two pages. The first page lists the population size of various groups of algae. A coded number shows the ten most abundant genera of algae and their count level. Code numbers used are identified on page 32. Blank spaces on the data sheets signify that counts of other genera were below a level of 150 per ml. The second page of plankton data lists the four dominant diatom species and their occurrence as a percent of the total diatom population. The percent of occurrence of all other diatom species is shown in the next column. Identification codes of species are given on page 33.

The detectable numbers per ml. of fungi, sheathed bacteria and protozoa are shown in the next two columns. The rotifer and crustacea totals per liter are listed together with the genera where these occurred at a count level of five or more per liter for rotifers and three or more per liter for crustacea. Nematode and miscellaneous animal form counts per liter appear in the last two columns.

A dash (—) indicates that no analysis was made. A zero count of each group is indicated by "0". Blank spaces under abundance and dominance columns indicate that the populations were too few to be included or were absent. Coding for abundant genera of rotifer and crustacea population levels are presented on page 34.

PLANKTON POPULATION

Identification Codes of Algae Genera and Count Levels of Most Abundant Genera

KEY TO COUNT LEVEL (per ml.)

1 150 to 300
2 301 to 600
3 601 to 1,200
4 1,201 to 2,400
5 2,401 to 4,800
6 4,801 to 9,600
7 9,601 to 19,200
8 19,201 to 38,400
9 38,401 and over

Code to ALGAE GENERA (Producers)

Blue-green Algae

01 Agmenellum (Merismopedia)
02 Anacystis (Microcystis)
03 Anacystis
04 Coccochloris
05 Gomphosphaeria
06, 07, 08 Reserve
09 Other genus
10 Other genus

Filamentous blue-greens

11 Anabaena
12 Aphanizomenon
13 Arthrospira
14 Lyngbya
15 Oscillatoria
16 Phormidium
17 Raphidiopsis
18 Spirulina
19, 20, 21 Reserve
22 Other genus
23 Other genus

Coccoid green algae

24 Actinastrum
25 Ankistrodesmus
26 Chlorella-type
27 Chlorococcum
28 Closterium
29 Coelastrum
30 Crucigenia
31 Dictyosphaerium
32 Golenkinia
33 Lagerheimia
34 Micractinium
35 Oocystis
36 Palmellococcus
37 Pediastrum
38 Scenedesmus
39 Staurastrum
40 Tetradesmus
41 Tetrastrum
42, 43 Reserve
44 Other genus
45 Other genus

Filamentous green algae

46 Cladophora
47 Stichococcus
48 Stigeoclonium
49 Reserve
50 Other genus

Green flagellates

51 Chlamydomonas including Carteria
52 Euglena
53 Lepocinclis
54 Pandorina
55 Phacotus
56 Phacus
57 Trachelomonas
58 Reserve
59 Other genus

Other pigmented flagellates

60 Chromulina
61 Dinobryon
62 Gymnodinium
63 Peridinium
64 Reserve
65 Other genus

Diatoms
(with chromatophores)

Centric

66 Biddulphia
67 Coscinodiscus
68 Cyclotella
69 Melosira
70 Rhizosolenia
71 Stephanodiscus
72 Other genus

Pennate

73 Achnanthes
74 Amphiprora
75 Amphora
76 Anomoeoneis
77 Asterionella
78 Caloneis
79 Cocconeis
80 Cymatopleura
81 Cymbella
82 Diatoma
83 Diploneis
84 Fragilaria
85 Gomphonema
86 Gyrosigma
87 Navicula
88 Nitzschia
89 Pleurosigma
90 Rhoicosphenia
91 Surirella
92 Synedra
93 Tabellaria
94, 95, 96 Reserve
97 Other genus
98 Other genus
99 Other genus

PLANKTON POPULATION

Identification Code for Diatom Species

NO.	SPECIES	NO.	SPECIES	NO.	SPECIES
01	Achnanthes lanceolata	35	Diatoma elongatum	69	Nitzschia denticula
02	Achnanthes minutissima	36	Diatoma vulgare	70	Nitzschia (Lancelolatae group)
03	Achnanthes sp.	37	Diatoma sp.	71	Nitzschia sp. (first)
04	Amphiprora paludosa	38	Diploneis smithii	72	Nitzschia sp. (second)
05	Amphiprora sp.	39	Diploneis sp.	73	Opephora martyi
06	Amphora ovalis	40	Epithemia turgida	74	Pinnularia sp.
07	Amphora sp.	41	Epithemia sorex	75	Pleurosigma delicatulum
08	Anomoeoneis exilis	42	Epithemia sp.	76	Rhoicosphenia curvata
09	Asterionella formosa	43	Eunotia sp. (first)	77	Rhizosolenia eriensis
10	Bacillaria paradoxa	44	Eunotia sp. (second)	78	Rhopalodia gibba
11	Biddulphia laevis	45	Fragilaria capucina	79	Rhopalodia sp.
12	Caloneis amphisbaena	46	Fragilaria construens	80	Stephanodiscus astraea var. minutula
13	Caloneis sp.	47	Fragilaria crotonensis	81	Stephanodiscus dubius
14	Ceratoneis arcus	48	Fragilaria pinnata	82	Stephanodiscus hantzschii
15	Cocconeis pediculus	49	Fragilaria sp.	83	Stephanodiscus niagarae
16	Cocconeis placentula	50	Frustulia sp.	84	Stephanodiscus sp.
17	Cocconeis sp.	51	Gomphonema olivaceum	85	Surirella brightwelli
18	Coscinodiscus rothii	52	Gomphonema sp.	86	Surirella ovata
19	Coscinodiscus (brackish)	53	Gyrosigma kutzingii	87	Surirella striatula
20	Coscinodiscus sp.	54	Gyrosigma sp.	88	Surirella sp.
21	Cymatopleura solea	55	Hantzchia amphioxys	89	Synedra acus
22	Cymatosira belgica	56	Melosira ambigua	90	Synedra pulchella
23	Cyclotella atomus	57	Melosira distans var. alpigena	91	Synedra nana
24	Cyclotella comta	58	Melosira granulata	92	Synedra ulna
25	Cyclotella kutzingiana	59	Melosira binderana	93	Synedra vaucheriae
26	Cyclotella meneghiniana	60	Melosira islandica	94	Synedra sp.
27	Cyclotella pseudostelligera	61	Melosira italica	95	Tabellaria fenestrata
28	Cyclotella stelligera	62	Melosira varians	96	Tabellaria flocculosa
29	Cyclotella striata	63	Meridion circulare	97	Any entity not found above (first)
30	Cyclotella sp.	64	Navicula cryptocephala	98	Any entity not found above (second)
31	Cymbella ventricosa	65	Navicula sp. (first)	99	Reserved for future entity
32	Cymbella tumida	66	Navicula sp. (second)	xx	Insignificant or population inadequate
33	Cymbella sp.	67	Nitzschia acicularis		
34	Denticula sp.	68	Nitzschia tryblionella		

PLANKTON POPULATION

Identification Codes of Microinvertebrate Genera and Count Levels of Most Abundant Genera

Genera of ROTIFERS
Key to counts per liter

1	5 to 10
2	11 to 20
3	21 to 40
4	41 to 80
5	81 to 160
6	161 to 320
7	321 to 640
8	641 to 1,680
9	1,681 and over

Genera of CRUSTACEA
Key to counts per liter

1	3 to 5
2	6 to 10
3	11 to 20
4	21 to 40
5	41 and over

Code to
MICROINVERTEBRATES

Rotifers

01	Asplanchna
02	Brachionus (also Platyias)
03	Collotheca
04	Cephalodella
05	Chromogaster
06	Euchlanis
07	Filinia
08	Gastropus
09	Hexarthra (also Pedalia)
10	Kellicottia
11	Keratella
12	Lepadella
13	Monostyla (also Lecane)
14	Notholca
15	Philodina and similar contracted bdelloids
16	Ploesoma
17	Polyarthra
18	Pompholyx
19	Proales
20	Rotaria
21	Synchaeta
22	Trichocerca
23	to 45 Reserve
46	Other genus
47	Other genus
48	Other genus
49	Other genus

Cladocerans

50	Nauplii
51	Bosmina and related genera
52	Daphnia and related genera
53	Moina
54	Polyphemus
55	to 72 Reserve
73	Other genus
74	Other genus
75	Other genus

Copepods

76	Cyclops, Euclops, and Paracyclops
77	Diaptomus
78	to 97 Reserve
98	Other genus
99	Other genus

Blank—Insignificant or population inadequate

Organic Chemicals

The data relating to extractables are in micrograms per liter or parts per billion. Zeros when reported have been entered. A dash indicates that the respective results were not reported. An asterisk in the column showing end of sample date indicates that the determinations are for composited samples taken on and before the date shown. The extent of compositing can be determined by examining the gallons filtered, which is the sum of the applicable individual samples immediately above it.

Chemical, Physical and Bacteriological Analyses

The data entered in each column are as reported. A dash signifies that the particular test was not performed. Zeros when meaningful have been entered. An asterisk preceding a number should be read as "less than" the number following it.

Trace Elements and Other Determinations

For a discussion of the sensitivity limits of the determinations performed with spectrographic methods, see page 17.

ERRATA

COLIFORM ORGANISMS

Erroneously reported coliform data for the Colorado River at Loma, Colo., have appeared in previous Annual Compilations, for all dates since May 26, 1958. In using these previously published data, all coliform results cited for Loma should be multiplied by a factor of 100.

Analytical and Flow Data

687-228 O-63—4

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	PENNSYLVANIA
MAJOR BASIN	OHIO RIVER
MINOR BASIN	ALLEGHENY RIVER
STATION LOCATION	ALLEGHENY RIVER AT
	PITTSBURGH, PENNSYLVANIA 79

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	4	61	10	14	0	1	0	1	0	1	16	8	26	10	42	13						
10	11	61	10	27	0	1	0	1	0	1	1	7	15	10	16	12						
10	18	61	11	1	0	1	0	2	0	2	0	8	13	11	13	13						
10	25	61	11	6	0	1	0	2	0	2	0	9	16	10	16	13						
11	1	61	11	15	0	1	0	2	0	2	2	8	15	11	17	13						
11	8	61	11	21	0	1	0	1	0	1	0	8	12	10	12	13						
2	21	62	3	6	0	1	0	1	0	1	3	4	16	5	19	6						
2	28	62	3	13	0	1	0	1	0	1	32	5	28	6	60	7						
3	7	62	3	20	-	-	-	-	-	-	30	6	26	7	56	9						
3	14	62	3	28	0	1	0	1	0	1	28	5	19	5	47	7						
3	21	62	4	3	-	-	-	-	-	-	28	6	24	7	52	9						
3	28	62	4	9	0	1	0	1	0	1	20	5	12	5	32	7						
4	4	62	4	19	-	-	-	-	-	-	40	7	10	6	50	9						
4	11	62	4	27	-	-	-	-	-	-	0	6	10	6	10	8						
4	18	62	5	1	-	-	-	-	-	-	0	5	3	6	3	7						
4	25	62	5	28	0	1	0	0	0	1	3	7	4	8	7	11						
5	2	62	6	25	-	-	-	-	-	-	2	5	8	5	10	7						
5	9	62	7	11	-	-	-	-	-	-	2	5	5	7	7	9						
5	16	62	6	25	-	-	-	-	-	-	2	3	7	4	9	5						
5	23	62	6	27	-	-	-	-	-	-	5	7	15	8	20	11						
6	6	62	7	5	-	-	-	-	-	-	2	7	20	9	22	11						
6	13	62	7	12	-	-	-	-	-	-	0	8	14	9	14	12						
6	20	62	8	15	-	-	-	-	-	-	5	7	10	9	15	11						
6	27	62	8	3	0	0	0	1	0	1	3	6	14	8	17	10						
7	11	62	10	2	-	-	-	-	-	-	1	5	12	8	13	9						
7	17	62	8	3	-	-	-	-	-	-	0	7	12	10	12	12						
7	25	62	8	15	0	1	0	1	0	1	0	22	16	14	16	26						
8	1	62	8	23	-	-	-	-	-	-	2	11	18	13	20	17						
8	8	62	8	29	-	-	-	-	-	-	6	11	15	13	21	17						
8	15	62	10	8	-	-	-	-	-	-	7	10	10	14	17	17						
8	22	62	9	6	-	-	-	-	-	-	10	11	29	15	39	19						
8	29	62	9	11	0	1	0	3	0	3	6	13	15	19	21	23						
9	5	62	10	1	-	-	-	-	-	-	6	11	13	15	19	19						
9	12	62	10	1	-	-	-	-	-	-	0	11	66	20	66	23						
9	19	62	10	10	-	-	-	-	-	-	3	6	6	11	9	13						
9	26	62	10	18	0	1	0	2	0	2	4	11	17	14	21	18						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE PENNSYLVANIA
MAJOR BASIN OHIO RIVER
MINOR BASIN ALLEGHENY RIVER
STATION LOCATION ALLEGHENY RIVER AT
PITTSBURGH, PENNSYLVANIA 79

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	18	61	400	0	0	0	0	310	0	20	40	0	40	51	2																		
11	22	61	700	20	0	40	0	20	0	350	270	40	120	68	1	71	1																
12	6	61	400	0	20	40	0	20	20	80	190	0	120																				
12	20	61	200	0	0	0	20	20	0	40	170	0	40																				
1	3	62	100	0	0	0	0	0	0	50	90	0	20																				
1	17	62	500	0	0	0	0	0	0	160	310	110	510																				
2	7	62	400	0	20	20	20	70	0	0	230	0	50																				
2	21	62	200	20	0	0	0	20	0	20	100	20	0																				
3	7	62	400	0	0	0	0	0	0	20	350	0	0																				
3	21	62	600	0	0	0	0	20	0	110	500	0	50	92	1																		
4	4	62	1100	20	0	20	0	0	0	40	990	20	120	82	1	92	2																
4	18	62	700	0	0	0	0	40	0	60	580	0	120	92	1	88	1																
5	9	62	1800	40	20	150	0	20	40	1120	440	60	190	71	3	92	1																
5	23	62	400	0	0	60	0	80	20	120	150	0	0																				
6	6	62	700	0	0	310	0	80	20	100	190	0	0																				
6	20	62	9600	740	0	3520	0	910	210	3420	790	540	40	69	4	25	3	68	3	51	3	3	3	34	2	24	2	40	2	38	2	71	1
7	18	62	600	0	20	170	0	120	250	40	0	0	20	63	1																		
7	31	62	1400	0	0	270	0	830	120	80	80	80	0	51	3																		
8	15	62	2100	60	0	730	310	520	60	330	120	0	210	51	2	25	2	50	2	38	1												
9	5	62	1800	0	0	800	0	380	170	300	170	130	130	38	2	51	2	40	2	68	1												
9	19	62	900	0	0	780	0	30	0	20	30	20	20																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE PENNSYLVANIA
MAJOR BASIN OHIO RIVER
MINOR BASIN ALLEGHENY RIVER
STATION LOCATION ALLEGHENY RIVER AT
PITTSBURGH, PENNSYLVANIA 079

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	18	61	88	41	82	6	9	5	92	5	43	750	0	0											3							0	0
11	22	61	82	16	23	9	88	6	45	5	64	0	0	0											0							0	0
12	6	61	62	7	93	7	82	7	2	5	74	0	0	3											0							0	0
12	20	61										0	0	2											0							1	0
1	3	62										0	0	0											0							0	0
1	17	62	36	9	92	6	2	6	70	6	73	20	0	1											1							1	0
2	7	62	92	9	65	8	70	8	2	7	68	20	0	0											0							0	0
2	21	62										0	0	0											0							0	0
3	7	62	36	12	92	11	37	10	2	7	60	0	0	1											0							1	0
3	21	62	92	39	36	19	62	6	46	3	33	20	0	0											0							0	0
4	4	62	92	34	36	17	62	9	71	5	35	0	0	5											0							2	0
4	18	62	92	13	93	10	71	7	37	5	65	40	0	0											0							0	0
5	9	62	82	30	92	27	56	4	65	4	35	0	0	0											0							0	0
5	23	62	92	45	36	6	82	6	64	4	39	0	0	0											0							0	0
6	6	62	92	12	64	10	82	7	71	6	65	0	0	32	11	2	17	1							6	50	2					0	0
6	20	62	57	57	56	5	26	5	23	5	28	0	0	18	2	1	11	1							2							1	0
7	18	62	57	12	92	11	27	9	56	9	59	0	0	61	2	4	11	1							1							0	0
7	31	62	57	10	82	8	27	7	26	6	69	0	0	114	11	4	18	2	17	1					16	51	2	50	1	76	1	0	0
8	15	62	57	26	70	9	82	8	56	7	50	0	0	148	17	5	16	3	11	2	21	1			50	50	4	51	3	53	2	0	0
9	5	62	57	12	82	9	92	6	27	6	67	40	0	198	17	5	11	3	16	3					172	50	5	76	5	51	4	0	0
9	19	62	71	13	27	8	26	6	88	6	67	0	0	26	2	3									15	76	2	51	2	50	1	0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE PENNSYLVANIA
MAJOR BASIN OHIO RIVER
MINOR BASIN ALLEGHENY RIVER
STATION LOCATION ALLEGHENY RIVER AT
PITTSBURGH, PENNSYLVANIA 79

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END			TOTAL	CHLOROFORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY							TOTAL	ALIPHATICS	AROMATICS	OXYGENATED COMPOUNDS	LOSS				
10	4	61	10	20	7429	252	93	159	3	13	34	6	3	23	2	13	9	2	19
11	8	61	11	22	7188	167	69	98	1	10	35	9	4	22	1	10	5	1	6
12	21	61	1	18	6115	154	56	98	2	10	26	10	5	11	0	7	4	1	6
2	7	62	2	21	4234	115	48	67	1	10	21	7	3	9	2	7	2	1	6
3	13	62	3	20	355	*	–	–	–	–	–	–	–	–	–	–	–	–	–
5	4	62	5	27	4020	223	127	96	5	29	38	9	3	25	1	14	17	1	23
6	25	62	7	13	5302	368	184	184	5	35	52	7	4	38	3	24	26	2	40
8	2	62	8	17	3731	402	192	210	2	40	56	8	5	40	3	27	27	4	36
9	11	62	9	19	5772	246	94	152	7	30	20	3	2	15	0	8	9	1	19

* LOW FLOW – NOT PROCESSED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN OHIO RIVER
MINOR BASIN ALLEGHENY RIVER
STATION LOCATION ALLEGHENY RIVER AT
PITTSBURGH, PENNSYLVANIA 79

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
10	4	61	19.0	8.4	6.2	1.4	7	.3	-	.0	32	10	180	0	5	193	.2	378	-
10	10	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	670
10	11	61	19.0	8.5	6.4	1.1	7	.6	-	.9	32	11	176	0	3	183	.0	357	-
10	17	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	880
10	18	61	17.0	8.6	6.5	1.6	3	.4	.9	.7	38		196	0	3	202	.0	409	-
10	24	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1800
10	25	61	16.0	8.8	6.7	1.2	5	.4	9.7	1.1	40	15	208	0	5	191	.0	405	-
10	31	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1300
11	1	61	15.0	9.4	6.6	-	7	.4	9.2	.8	43	15	196	0	5	203	.2	417	-
11	8	61	14.0	9.6	7.0	2.6	8	.4	7.3	.5	45	25	176	0	8	166	.0	363	-
11	14	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8800
11	15	61	12.0	10.0	7.0	1.4	10	.3	7.7	.6	46	28	192	0	10	171	.0	202	-
11	21	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7300
11	22	61	8.0	12.6	7.1	1.6	10	.6	-	.3	40	32	134	0	12	95	.1	242	-
11	28	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13000
11	29	61	6.0	12.8	7.0	1.8	17	.6	5.3	.2	14	17	72	30	45	54	.0	157	-
12	5	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2100
12	6	61	6.0	12.8	6.6	1.2	17	.8	4.8	.3	14	16	80	25	20	69	.0	148	-
12	12	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1200
12	13	61	4.0	13.6	7.1	1.0	9	.3	4.7	.2	19	30	104	20	8	68	.0	172	-
12	20	61	3.0	14.1	6.9	1.4	14	1.0	5.4	.2	17	22	94	25	15	67	.1	226	-
12	26	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4900
12	27	61	.5	13.6	7.0	1.4	-	.6	4.8	.2	19	23	80	20	5	64	.0	176	-
1	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2600
1	3	62	.5	14.2	6.7	-	8	.6	5.6	.3	17	20	96	10	5	75	.0	177	-
1	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6200
1	10	62	2.0	15.6	6.8	1.4	33	.6	5.2	.2	16	21	74	25	50	58	.0	176	-
1	12	62	.0	14.8	6.7	2.0	11	.4	5.8	.2	14	14	82	20	10	62	.0	162	-
1	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	670
1	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1100
1	24	62	1.0	14.2	7.1	1.0	14	.8	6.8	.1	15	18	92	20	15	63	.0	192	-
1	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	530
1	31	62	.0	14.6	7.2	2.2	16	.6	4.8	.1	11	12	60	30	60	53	.0	140	-
2	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
2	7	62	.0	14.6	6.6	1.0	27	1.6	3.7	.2	12	12	80	15	15	63	.0	143	-
2	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*11
2	14	62	1.0	14.4	6.5	1.2	25	1.6	4.9	.2	17	13	88	0	5	73	.0	180	-
2	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	570

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN OHIO RIVER
MINOR BASIN ALLEGHENY RIVER
STATION LOCATION ALLEGHENY RIVER AT
PITTSBURGH, PENNSYLVANIA 79

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
2	21	62	3.0	13.6	6.7	.8	18	1.8	-	.1	16	15	102	0	10	88	.0	228	-
2	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	380
2	28	62	4.0	14.0	6.8	1.2	34	.7	4.6	.1	14	17	84	25	90	59	.0	180	-
3	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220
3	7	62	3.0	14.2	6.7	-	29	1.2	4.0	.2	13	11	74	0	30	68	.0	150	-
3	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3000
3	14	62	3.0	14.2	6.8	1.6	31	.8	4.5	.2	14	20	70	0	80	62	.0	173	-
3	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4200
3	21	62	5.0	13.4	7.2	.6	39	.8	4.6	.2	12	15	68	5	40	62	.0	168	-
3	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	970
3	28	62	6.0	13.0	6.3	.8	39	.8	4.4	.1	24	11	50	0	50	50	.0	108	-
4	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	180
4	4	62	6.0	13.4	6.4	1.2	48	.8	4.9	.1	10	9	50	15	45	45	.1	114	-
4	10	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1500
4	11	62	-	-	-	-	-	-	-	-	14	-	-	-	-	-	-	-	-
4	14	62	9.0	12.6	6.8	.8	30	.7	4.1	.0	10	13	50	5	35	49	.0	115	-
4	17	62	-	-	-	-	-	-	-	-	20	-	-	-	-	-	-	-	300
4	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50
4	25	62	12.0	12.4	6.6	.6	37	.6	3.9	.1	11	13	70	0	10	65	.0	162	-
5	1	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2400
5	2	62	19.0	9.4	6.3	.7	21	.4	3.7	.1	12	12	86	0	10	80	.0	180	-
5	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4300
5	9	62	16.0	9.2	6.7	.7	37	.5	2.8	.1	10	17	70	0	20	63	.0	145	-
5	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3100
5	16	62	19.0	9.4	6.6	1.0	30	.5	2.9	.2	13	17	82	0	12	71	.0	143	-
5	22	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1400
5	23	62	23.0	8.4	6.7	1.0	25	.6	4.4	.1	15	14	100	0	8	92	.0	223	-
5	29	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2600
6	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18000
6	6	62	23.0	-	6.5	-	-	.6	4.8	.2	18	15	122	0	10	124	.0	243	-
6	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500
6	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5700
6	20	62	24.0	8.5	7.2	1.6	20	.7	5.2	.2	19	23	82	15	15	74	.0	194	-
6	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1900
6	27	62	25.0	8.8	7.1	1.0	28	.7	6.2	.2	16	23	94	15	15	86	.0	218	-
7	10	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2300
7	11	62	26.0	8.0	7.1	.8	30	.4	5.9	.2	20	16	164	0	10	142	.0	281	-
7	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300
7	18	62	26.0	7.4	6.8	2.0	19	.5	7.8	.2	21	10	180	0	5	168	.0	318	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN OHIO RIVER
MINOR BASIN ALLEGHENY RIVER
STATION LOCATION ALLEGHENY RIVER AT
PITTSBURGH, PENNSYLVANIA 79

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700
7	25	62	26.0	7.8	6.9	1.0	25	.3	8.9	-	27	14	188	0	5	180	.0	345	-
7	31	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	380
8	14	62	26.0	7.4	6.9	1.4	21	.4	5.6	.6	31	23	168	0	10	158	.0	369	5300
8	22	62	29.0	-	5.2	-	-	.4	6.0	.9	35	4	224	0	5	249	.0	468	*50
8	28	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4200
8	29	62	25.0	-	6.7	1.4	22	.6	6.2	.6	44	23	180	0	10	160	.0	388	-
9	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1400
9	12	62	7.2	10.0	3.7	1.8	18	.4	5.8	.5	30	14	230	0	5	220	.0	562	-
9	25	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1500

STREAM FLOW DATA - 1961-1962

Thourand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Natrona, Pennsylvania
Operated by U.S. Geological Survey

STATE	Pennsylvania
MAJOR BASIN	Ohio River
MINOR BASIN	Allegheny River
STATION LOCATION	Allegheny River at Pittsburgh, Pennsylvania

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	2.140	3.110	14.000	5.360	18.700	42.200	61.900	14.900	5.490	2.770	2.060	1.710
2	1.960	3.160	11.600	5.430	15.800	42.200	58.900	19.700	6.120	2.240	2.000	2.140
3	2.140	3.250	9.370	6.120	14.900	50.300	60.400	26.200	5.490	2.540	1.960	1.860
4	2.390	3.340	7.870	7.600	14.400	44.800	55.900	28.600	4.760	2.690	2.310	2.100
5	2.540	2.900	8.510	8.150	15.400	33.400	48.900	25.100	5.180	2.500	1.850	2.460
6	2.540	2.420	8.580	10.100	18.700	26.800	40.900	20.700	5.060	2.500	1.410	2.980
7	2.500	2.460	11.600	16.800	20.700	22.400	44.800	16.700	5.060	2.580	1.700	3.200
8	2.310	2.940	14.000	37.200	19.700	19.700	48.900	16.700	5.060	2.240	1.890	2.560
9	2.060	2.940	12.800	42.200	16.200	15.400	57.400	16.200	4.470	1.860	2.060	2.200
10	2.170	3.030	10.100	36.700	14.900	14.000	57.400	15.800	3.800	1.860	2.000	1.930
11	2.170	2.900	9.370	20.600	12.800	12.800	58.900	14.000	3.200	1.960	2.060	2.060
12	2.000	2.770	10.800	13.600	10.100	16.900	53.100	13.200	3.440	1.890	1.930	2.240
13	1.950	2.500	13.600	10.800	9.740	35.800	42.200	11.200	6.470	2.000	1.760	2.200
14	2.420	3.190	16.700	8.940	10.100	46.100	44.800	10.500	14.400	2.060	1.890	2.140
15	2.350	3.960	19.200	9.740	10.100	47.500	55.900	10.100	18.700	1.960	1.930	2.030
16	2.310	5.700	15.800	14.800	9.740	39.600	60.400	9.370	18.700	1.570	1.890	1.830
17	2.100	10.500	12.800	18.700	9.370	30.400	54.500	8.940	15.400	1.670	1.890	1.600
18	2.170	14.000	11.600	18.700	8.870	25.100	48.900	8.440	11.600	1.860	1.890	1.660
19	2.140	16.700	14.900	15.800	8.510	22.900	40.900	7.940	9.370	1.700	1.700	1.860
20	2.310	14.400	16.200	12.800	9.740	24.000	31.000	6.380	7.730	1.700	1.380	1.830
21	2.540	12.400	21.800	10.500	10.500	30.400	26.800	6.000	6.650	1.810	1.510	1.800
22	2.320	10.100	23.400	11.200	10.800	44.800	22.900	6.650	5.490	1.890	1.860	1.700
23	1.830	10.500	21.800	18.000	14.400	57.400	20.700	6.450	4.020	1.730	2.310	1.570
24	1.800	20.300	18.700	22.400	29.800	69.400	22.400	6.710	5.000	2.060	2.060	1.410
25	1.960	38.300	15.800	29.800	20.700	67.900	27.400	7.320	4.420	2.200	2.030	1.410
26	2.100	43.500	12.800	28.600	26.800	61.900	22.900	8.220	4.300	2.200	1.580	1.600
27	2.100	34.600	12.000	34.600	28.600	55.900	19.700	7.250	4.130	2.350	1.230	1.900
28	2.170	26.200	12.000	37.000	38.300	44.800	18.200	6.120	3.740	2.390	1.200	3.850
29	2.280	20.700	10.800	40.900		39.600	15.400	6.260	3.440	2.420	1.260	4.390
30	2.200	16.700	9.300	37.000		37.000	13.200	5.800	3.200	2.060	1.350	5.320
31	2.840		5.800	28.600		44.800		4.700		2.170	1.410	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE NEW MEXICO
MAJOR BASIN COLORADO RIVER
MINOR BASIN SAN JUAN RIVER
STATION LOCATION ANIMAS RIVER AT
CEDAR HILL, NEW MEXICO 56

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	13	61	10	25	5000#	87	24	63	1	6	7	1	1	5	0	2	2	1	5
11	17	61	11	27	7448	70	25	45	0	6	12	3	1	8	0	3	1	0	2
12	4	61	12	18	8540	52	16	36	0	5	7	1	1	5	0	2	1	0	1
1	2	62	1	15	8912	43	12	31	0	2	6	1	1	4	0	1	1	0	2
2	5	62	2	12	3719	80	21	59	0	4	10	2	1	7	0	2	1	1	3
3	5	62	3	13	5000	59	16	43	0	3	8	2	1	5	0	1	1	0	3
4	2	62	4	9	3285	82	28	54	1	6	13	3	1	8	1	3	1	1	3
5	7	62	5	14	3036	106	48	58	1	15	12	3	0	9	0	5	4	1	10
6	4	62	6	11	2330	68	24	44	0	8	8	2	1	5	0	3	1	0	4
7	2	62	7	9	5300	48	14	34	0	4	6	2	1	3	0	1	1	0	2
8	6	62	8	13	2765	141	39	102	1	11	15	3	1	11	0	4	2	1	5
9	4	62	9	10	4556	112	28	84	1	8	12	2	1	9	0	4	1	1	1

ESTIMATED

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEW MEXICO
MAJOR BASIN COLORADO RIVER
MINOR BASIN SAN JUAN RIVER
STATION LOCATION ANIMAS RIVER AT
CEDAR HILL, NEW MEXICO 56

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	11	8	1	1	3	2	4	2	8	5	21	7	29	9						
10	16	61	11	1	4	2	6	2	10	3	13	6	12	6	25	8						
10	23	61	11	7	2	1	6	2	8	2	10	5	48	7	58	9						
10	30	61	11	13	0	1	2	2	2	2	15	5	21	6	36	8						
11	6	61	11	21	0	1	10	3	10	3	9	9	34	11	43	14						
11	13	61	11	28	1	1	7	3	8	3	6	5	27	8	33	9						
12	18	61	1	4	3	2	12	4	15	4	20	9	34	11	54	14						
12	26	61	1	9	5	2	9	3	14	4	24	9	31	11	55	14						
1	2	62	1	23	2	1	16	4	18	4	9	8	32	11	41	14						
1	8	62	1	19	1	1	10	3	11	3	4	8	19	11	23	14						
1	15	62	1	31	1	1	13	4	14	4	37	9	32	11	69	14						
1	22	62	2	6	2	1	12	4	14	4	23	9	38	11	61	14						
1	29	62	2	12	1	1	16	5	17	5	10	8	51	12	61	14						
2	5	62	2	19	2	1	4	3	6	3	11	4	32	7	43	8						
2	12	62	2	27	36	15	9	4	45	16	194	21	40	11	234	24						
2	19	62	3	7	73	17	8	4	81	17	217	20	60	12	277	23						
2	26	62	3	14	5	3	19	5	24	6	65	11	62	12	127	16						
3	5	62	3	20	2	1	8	3	10	3	12	8	36	11	48	14						
3	13	62	3	27	3	2	8	4	11	4	39	10	48	12	87	16						
3	19	62	4	3	27	9	9	3	36	9	111	16	27	10	138	19						
3	26	62	4	12	18	11	2	2	20	11	135	20	19	9	154	22						
4	2	62	4	23	17	6	1	2	18	7	71	14	30	10	101	17						
4	11	62	4	25	9	3	4	2	13	4	53	7	30	6	83	9						
4	23	62	5	25	2	2	1	1	3	2	18	8	29	7	47	11						
4	30	62	6	7	1	1	1	1	2	1	19	6	22	6	41	8						
5	7	62	6	14	21	7	1	1	22	7	101	14	14	8	115	16						
5	14	62	7	26	1	1	0	1	1	1	13	7	14	7	27	10						
5	21	62	6	29	2	1	1	1	3	1	14	4	14	4	28	6						
5	31	62	7	3	5	2	1	1	6	2	41	8	16	7	57	11						
6	4	62	7	3	2	1	1	1	3	1	10	6	18	7	28	9						
6	11	62	7	9	1	1	1	1	2	1	16	12	13	9	29	15						
6	19	62	7	23	1	1	1	1	1	1	20	6	10	6	30	8						
6	25	62	7	24	2	1	2	1	4	1	23	8	14	6	37	10						
7	2	62	10	17	0	0	0	1	0	1	2	5	4	7	6	8						
7	9	62	8	13	0	0	1	1	1	1	1	3	11	4	12	5						
7	18	62	8	2	1	1	3	2	4	2	13	6	11	8	24	10						
7	23	62	8	20	0	0	3	1	3	1	3	2	15	3	18	4						
7	30	62	8	31	1	1	3	2	4	2	5	6	16	10	21	12						
8	6	62	8	23	0	1	1	2	1	2	2	5	12	8	14	9						
8	13	62	8	30	0	1	7	3	7	3	8	11	20	13	28	17						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEW MEXICO
MAJOR BASIN COLORADO RIVER
MINOR BASIN SAN JUAN RIVER
STATION LOCATION ANIMAS RIVER AT
CEDAR HILL, NEW MEXICO 56

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	20	62	9	9	0	1	2	2	2	2	23	8	44	10	67	13						
8	27	62	9	11	2	2	10	4	12	4	3	17	27	17	30	24						
9	4	62	9	20	1	1	9	4	10	4	1	11	12	15	13	19						
9	10	62	10	1	0	1	9	4	9	5	9	13	54	18	63	22						
9	18	62	10	10	0	1	5	3	5	3	2	10	24	15	26	18						
9	24	62	10	23	1	1	4	3	5	3	0	22	15	13	15	26						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW MEXICO
MAJOR BASIN COLORADO RIVER
MINOR BASIN SAN JUAN RIVER
STATION LOCATION ANIMAS RIVER AT
CEDAR HILL, NEW MEXICO 56

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE		CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	400	0	0	0	0	0	0	20	380		0	540																				
11	6	61	1500	0	0	0	0	100	20	150	1260		0	150	91	3	77	1																
10	16	61	1800	0	40	0	20	0	0	20	1700		0	190	91	3	92	1																
11	20	61	700	50	0	0	0	0	20	50	620		0	200	91	1																		
12	4	61	2300	0	0	0	20	50	0	0	2210		0	800	91	4	92	1	87	1														
12	18	61	1200	0	0	0	0	50	0	0	1150		20	110	91	2	92	1																
1	2	62	600	0	0	0	0	0	20	80	460		0	40	91	1																		
1	15	62	300	20	50	0	0	20	0	0	180		0	20																				
2	5	62	900	0	40	0	20	20	20	20	750		0	120	91	2																		
2	19	62	3100	0	20	0	50	0	0	20	2970		0	620	91	5	81	1	87	1														
3	5	62	3000	0	80	0	0	120	0	230	2590		0	310	91	4	92	1	88	1	73	1												
3	19	62	3900	0	0	20	40	0	20	60	3710		0	440	91	4	92	2	81	1	82	1												
4	2	62	5100	0	80	0	60	100	0	40	4800		0	970	91	5	92	3	88	1	81	1	84	1	87	1	82	1						
4	16	62	4400	0	80	0	0	0	0	210	4070		110	2640	91	4	92	3	88	1	81	1	84	1	82	1	87	1						
5	7	62	2300	0	40	0	20	0	20	100	2070		0	500	91	3	92	1	73	1	81	1												
5	21	62	1300	0	0	0	0	800	0	80	420		0	130	57	3																		
6	4	62	1700	0	0	0	20	0	0	60	1590		0	210	92	2	87	1	91	1														
6	19	62	600	0	0	60	0	0	0	250	300		40	420																				
7	2	62	400	0	0	0	0	20	0	0	330		0	0																				
7	16	62	800	0	0	0	0	0	0	80	720		0	250	92	1																		
8	6	62	3700	0	0	40	190	0	0	210	3230		120	460	91	4	92	2	50	1	73	1												
8	20	62	3400	0	40	130	0	0	0	80	3170		0	1730	91	4	88	3	92	2														
9	4	62	100	0	0	70	0	0	0	10	70		10	2790																				
9	18	62	300	0	0	60	0	10	0	10	250		10	1280	92	1																		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW MEXICO
MAJOR BASIN COLORADO RIVER
MINOR BASIN SAN JUAN RIVER
STATION LOCATION ANIMAS RIVER AT
CEDAR HILL, NEW MEXICO 056

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	86	29	47	10	92	10	93	10	41	0	0	3											0							0	0
10	16	61	86	43	47	14	92	8	93	5	30	0	0	2											0							0	0
11	6	61	86	66	9	6	93	5	2	3	20	0	0	6	46	1									0							0	1
11	20	61	86	74	9	6	2	3	31	2	15	220	0	6	46	1									0							1	0
12	4	61	86	68	93	7	36	3	31	3	19	70	0	7	15	1									0							2	3
12	18	61	86	46	93	15	31	8	2	6	25	50	0	4											0							1	1
1	2	62	86	61	65	9	93	9	70	5	16	0	0	2											0							0	3
1	15	62	86	43	65	8	71	8	31	4	37	0	0	2											0							0	0
2	5	62	86	55	93	10	31	5	71	4	26	20	0	0											0							0	2
2	19	62										0	0	0											0							0	0
3	5	62	86	57	93	10	2	6	31	5	22	0	0	5											0							1	6
3	19	62	86	63	31	6	92	5	93	5	21	20	0	1											0							0	1
4	2	62	86	57	92	12	31	3	71	3	25	150	0	5	15	1									0							0	3
4	16	62	86	31	92	16	36	5	88	3	45	0	0	0											0							0	0
5	7	62	86	28	92	11	2	9	45	7	45	0	0	0											0							0	0
5	21	62	92	10	2	9	36	7	71	6	68	40	0	0											0							0	0
6	4	62	92	24	86	13	65	9	2	6	48	20	0	1											0							0	1
6	19	62	2	15	36	9	92	8	31	6	62	0	0	15	15	2									0							0	0
7	2	62	92	21	14	12	86	7	36	6	54	0	0	3											0							0	4
7	16	62	93	23	2	16	92	10	86	8	43	40	0	12	15	1									0							5	3
8	6	62	86	69	93	12	2	6	92	3	10	0	0	37	13	3	2	1							0							0	0
8	20	62	86	48	70	30	92	6	93	4	12	0	0	58	21	3	13	1	16	1					0							0	1
9	4	62	70	38	86	34	93	6	31	5	17	0	0	123	15	4	22	3	13	2	6	2	20	1	0							0	0
9	18	62	92	62	70	18	86	6	92	5	9	0	0	256	22	5	13	4	4	2	6	1	11	1	0							1	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW MEXICO
MAJOR BASIN COLORADO RIVER
MINOR BASIN SAN JUAN RIVER
STATION LOCATION ANIMAS RIVER AT
CEDAR HILL, NEW MEXICO 56

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	12.0	9.0	8.0	.1	-	-	-	.1	22	90	178	3	24	88	-	260	90
10	11	61	10.0	4.3	7.9	2.8	-	-	-	.1	25	178	126	3	17000	140	-	-	730
10	16	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3500
10	17	61	9.0	8.9	8.3	.9	-	-	-	.1	15	86	160	2	43	130	-	370	-
10	24	61	10.0	9.0	8.5	.3	-	-	-	.1	23	88	158	3	50	90	-	240	-
10	30	61	4.0	10.5	8.2	1.8	-	-	-	.3	19	94	178	3	33	82	.4	290	110
11	6	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
11	8	61	3.0	11.5	8.3	2.4	-	-	-	.3	34	100	170	-	13	162	-	310	-
11	14	61	4.4	10.2	8.3	2.4	-	-	-	.1	20	98	182	-	12	108	-	310	900
11	17	61	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-
11	20	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
11	22	61	3.7	11.2	8.2	1.4	-	-	-	.1	35	102	172	2	23	112	-	380	-
11	27	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54
11	28	61	4.0	13.0	8.4	2.0	-	-	-	.1	21	102	182	1	2	90	.4	-	-
12	5	61	3.0	13.3	8.4	.5	-	-	-	-	36	106	204	2	23	150	.4	450	100
12	13	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
12	18	61	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-
12	19	61	.0	11.6	7.9	1.2	-	-	-	.5	52	112	164	0	23	-	-	-	430
12	27	61	.0	11.6	8.1	2.0	-	-	-	.3	33	126	236	-	17	120	-	430	-
1	2	62	.0	8.8	8.0	1.0	-	-	-	.1	53	120	240	-	22	112	-	480	-
1	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	530
1	9	62	-	-	7.9	1.8	-	-	-	.3	28	-	224	1	10	128	-	430	51
1	15	62	.0	8.8	7.7	1.3	-	-	-	.0	53	124	244	-	16	146	-	500	-
1	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47
1	23	62	.5	10.0	8.0	1.9	-	-	-	.8	29	112	236	-	11	132	-	520	170
1	31	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1600
2	1	62	.0	9.9	7.9	1.6	-	-	-	.0	-		250	-	4	152	-	-	-
2	6	62	.0	8.2	7.8	1.4	-	-	-	.1	24	108	236	2	43	80	-	360	1300
2	12	62	7.0	9.3	8.0	3.9	9	-	-	.0	38	106	224	-	3100	132	-	444	-
2	19	62	10.0	-	7.6	-	-	-	-	.1	37	126	240	-	2575	-	-	-	270
2	26	62	4.0	6.9	7.7	1.0	-	-	-	.0	54	120	256	2	164	158	-	412	7700
3	5	62	3.0	-	8.3	-	-	-	-	.0	28	114	230	-	17	90	-	328	85000
3	13	62	2.0	9.7	8.2	2.5	7	-	-	.1	56	126	256	-	36	168	-	432	110
3	19	62	7.0	8.7	8.0	2.4	-	-	-	.1	28	122	256	-	1300	160	-	412	1700
3	26	62	4.0	8.5	8.1	2.9	-	-	-	.0	40	120	250	2	6750	85	1.0	404	-
4	3	62	11.0	7.4	8.1	1.6	-	-	-	.1	33	110	194	-	430	85	-	396	-
4	9	62	9.0	8.2	8.0	2.1	-	-	-	.7	31	108	176	-	228	88	-	380	-
4	16	62	16.0	6.3	7.8	5.0	-	-	-	.1	24	94	152	-	950	48	1.1	292	400
4	28	62	11.0	7.3	7.8	.2	-	-	-	.0	20	74	108	-	-	-	-	-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW MEXICO
MAJOR BASIN COLORADO RIVER
MINOR BASIN SAN JUAN RIVER
STATION LOCATION ANIMAS RIVER AT
CEDAR HILL, NEW MEXICO 56

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
4	30	62	10.0	9.2	7.8	2.4	-	-	-	.1	11	70	110	-	24	42	-	234	32
5	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6000
5	8	62	12.0	8.8	7.9	-	-	-	-	-	16	56	84	-	236	30	-	108	-
5	14	62	10.0	7.2	7.8	.6	13	-	-	.1	18	58	94	3	50	38	-	156	-
5	21	62	9.0	-	7.8	-	-	-	-	.1	16	76	118	-	38	51	-	228	-
5	28	62	11.0	5.9	7.7	4.9	-	-	-	.1	18	76	114	-	63	34	1.5	168	-
6	11	62	14.0	9.0	7.9	1.3	-	-	-	.4	9	56	104	-	90	29	.7	150	3400
6	19	62	18.0	5.7	7.8	.8	-	-	-	.0	16	64	112	-	36	37	.5	156	200
6	25	62	20.0	6.3	7.9	-	-	-	-	.0	15	56	98	-	64	30	.4	150	380
7	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	290
7	3	62	17.0	6.8	8.0	.7	-	-	-	.0	19	48	92	2	48	32	.5	160	-
7	9	62	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	480
7	10	62	19.0	-	8.5	-	-	-	-	.0	15	62	132	2	10	57	-	210	-
7	16	62	16.0	-	8.8	-	-	-	-	.5	27	70	134	1	2	55	-	250	240
7	23	62	19.0	9.1	8.5	.1	-	-	-	.0	20	74	152	-	7	60	-	280	590
7	30	62	18.0	6.0	8.6	1.5	-	-	-	.0	37	88	170	-	2	76	-	330	-
7	31	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2400
8	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4600
8	8	62	16.0	9.4	8.6	2.9	-	-	-	.0	36	100	194	1	12	74	-	410	-
8	13	62	21.0	10.6	8.7	2.2	-	-	-	.1	47	112	200	-	18	120	-	440	50
8	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220
8	21	62	19.0	8.3	8.8	.0	-	-	-	.0	42	120	220	-	4	108	-	460	-
8	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	440
8	28	62	17.0	10.0	8.5	1.8	-	-	-	.0	50	140	248	-	-	100	-	520	-
9	4	62	20.0	8.3	8.5	.8	-	-	-	-	46	160	276	-	-	93	-	600	10
9	10	62	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	300
9	11	62	13.0	10.5	8.5	2.3	-	-	-	.0	58	150	278	-	13	112	-	510	-
9	18	62	16.0	8.7	8.4	1.8	-	-	-	.0	52	156	274	-	-	120	-	554	1000
9	24	62	18.0	9.1	8.1	2.2	-	-	-	.0	40	92	172	-	28	90	-	380	6800

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Cedar Hill, New Mexico
Operated by U.S. Geological Survey

STATE	New Mexico
MAJOR BASIN	Colorado River
MINOR BASIN	San Juan River
STATION LOCATION	Animas River at Cedar Hill, New Mexico

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.598	.430	.350	.210	.250	.290	.535	1.660	1.620	2.940	.680	.278
2	.508	.460	.350	.200	.260	.320	.577	1.630	1.890	2.550	.639	.260
3	.467	.434	.340	.200	.270	.310	.650	1.730	2.310	2.240	.607	.251
4	.448	.373	.330	.210	.290	.310	.704	2.100	2.340	2.120	.577	.247
5	.422	.385	.320	.210	.290	.320	.738	2.680	2.660	1.990	.567	.234
6	.397	.373	.300	.210	.320	.320	.752	2.980	2.920	1.850	.531	.230
7	.373	.355	.290	.230	.320	.320	.796	3.370	3.220	1.850	.514	.230
8	.367	.367	.290	.230	.340	.320	.804	3.560	2.760	1.770	.483	.265
9	.759	.379	.290	.230	.340	.310	.773	3.820	2.880	1.700	.464	.265
10	.666	.403	.270	.200	.340	.300	.738	4.230	3.210	1.590	.449	.251
11	.522	.385	.250	.150	.350	.290	.704	4.340	3.320	1.520	.434	.247
12	.529	.391	.240	.200	.370	.280	.710	4.440	3.560	1.480	.430	.238
13	.543	.403	.240	.230	.380	.290	.887	4.140	3.650	1.480	.430	.230
14	.574	.397	.250	.230	.380	.280	1.200	3.540	3.730	1.330	.430	.230
15	.622	.385	.280	.220	.350	.300	1.630	2.760	3.270	1.180	.394	.230
16	.675	.403	.280	.210	.350	.300	2.120	2.200	2.570	1.080	.405	.226
17	.711	.397	.250	.220	.350	.300	2.380	1.850	2.020	1.020	.367	.226
18	.729	.403	.250	.230	.340	.300	2.600	1.540	1.660	.977	.357	.230
19	.702	.380	.230	.240	.320	.300	2.960	1.400	1.890	.977	.360	.221
20	.657	.380	.230	.230	.330	.300	3.300	1.510	2.720	1.000	.394	.247
21	.639	.390	.240	.230	.320	.310	3.290	1.760	3.140	.968	.405	.335
22	.606	.380	.230	.210	.310	.300	2.640	1.620	2.970	.923	.394	.480
23	.598	.370	.220	.210	.310	.310	2.330	1.530	3.000	.887	.391	.550
24	.529	.370	.210	.210	.310	.320	2.550	1.730	2.760	.896	.377	.448
25	.508	.370	.210	.230	.310	.350	3.110	2.060	2.670	.914	.360	.428
26	.487	.370	.210	.240	.300	.400	3.110	1.850	2.610	.950	.350	.409
27	.480	.360	.210	.240	.300	.450	2.700	1.950	2.700	.804	.328	.434
28	.467	.350	.200	.240	.290	.460	2.580	1.930	2.670	.738	.325	.508
29	.448	.350	.210	.240		.475	2.440	1.660	2.500	.686	.310	.508
30	.448	.350	.220	.240		.500	2.060	1.510	2.880	.674	.298	.448
31	.494		.220	.240		.480		1.510		.692	.292	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE FLORIDA
MAJOR BASIN SOUTHEAST
MINOR BASIN APALACHICOLA RIVER
STATION LOCATION APALACHICOLA RIVER AT
CHATTAHOOCHEE, FLORIDA 57

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	9	61	10	23	-	-	-	-	-	-	1	5	1	6	2	8						
10	18	61	11	1	-	-	-	-	-	-	4	5	4	6	8	8						
11	13	61	11	22	-	-	-	-	-	-	28	11	19	12	47	16						
11	27	61	12	5	0	1	0	1	0	1	9	4	9	4	18	6						
12	5	61	12	13	0	1	0	1	0	1	1	4	4	4	5	6						
2	26	62	3	13	1	1	0	0	1	1	28	6	24	6	52	8						
3	5	62	3	19	0	1	0	1	0	1	18	6	19	6	37	9						
3	12	62	3	23	-	-	-	-	-	-	18	6	12	6	30	8						
3	19	62	3	30	-	-	-	-	-	-	26	5	16	4	42	6						
3	29	62	4	12	-	-	-	-	-	-	27	6	20	6	47	8						
4	2	62	4	20	1	1	0	1	1	1	23	5	19	4	42	6						
4	12	62	4	26	-	-	-	-	-	-	31	6	24	6	55	8						
4	16	62	4	30	-	-	-	-	-	-	38	7	29	6	67	9						
4	23	62	6	16	-	-	-	-	-	-	19	4	26	4	45	6						
5	7	62	6	12	0	0	0	0	0	0	3	5	7	6	10	7						
5	15	62	6	25	-	-	-	-	-	-	5	6	15	8	20	10						
5	23	62	7	25	-	-	-	-	-	-	1	5	3	5	4	7						
6	1	62	7	2	-	-	-	-	-	-	4	5	14	6	18	8						
6	6	62	7	6	0	0	0	0	0	0	1	5	10	5	11	7						
6	12	62	7	10	-	-	-	-	-	-	7	6	14	7	21	9						
6	18	62	7	12	-	-	-	-	-	-	5	6	8	6	13	8						
6	21	62	8	16	-	-	-	-	-	-	3	6	9	8	12	10						
7	16	62	8	8	0	0	0	0	0	0	0	8	9	6	9	10						
7	31	62	8	17	-	-	-	-	-	-	3	5	12	6	15	7						
8	6	62	8	29	0	0	0	0	0	0	2	5	8	6	10	7						
8	13	62	8	27	-	-	-	-	-	-	3	3	9	3	12	4						
8	20	62	9	5	-	-	-	-	-	-	1	3	7	3	8	4						
9	5	62	9	19	1	1	0	1	1	1	1	10	5	11	6	15						
9	13	62	10	9	-	-	-	-	-	-	6	5	6	6	12	7						
9	18	62	10	14	-	-	-	-	-	-	3	5	0	6	3	7						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE FLORIDA
MAJOR BASIN SOUTHEAST
MINOR BASIN APALACHICOLA RIVER
STATION LOCATION APALACHICOLA RIVER AT
CHATTAHOOCHEE, FLORIDA 57

DATE OF SAMPLE				ALGAE (Number per milliliter)								INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	600	0	20	310	0	50	0	160	70	310	50																				
10	18	61	900	60	20	250	0	270	20	270	40	20	20	51	1	68	1																
11	6	61	6000	220	0	1250	0	270	450	3260	540	3020	110	71	4	68	3	38	2	55	1	57	1	25	1								
11	27	61	10000	0	0	660	0	150	0	8530	620	3540	370	68	5	71	5	69	4	88	2	87	1										
12	5	61	1600	20	0	150	0	150	20	1180	60	750	80	71	2	68	1																
12	13	61	1900	100	0	170	0	120	0	1450	80	600	60	69	3	68	2	71	2														
1	5	62	32100	20	31640	20	0	230	0	140	70	230	0	15	8	51	1																
1	15	62	200	0	0	0	0	60	60	40	20	0	0																				
1	22	62	00	0	0	0	0	0	0	0	20	0	0																				
2	8	62	4500	0	0	20	0	4470	0	0	0	0	0	57	5																		
2	19	62	100	0	0	0	20	0	0	20	40	0	0																				
3	5	62	00	0	0	0	0	20	0	0	20	0	0																				
3	19	62	00	0	0	0	0	0	20	20	0	20	0																				
4	2	62	1400	0	0	40	0	130	190	700	330	120	20	71	3																		
4	16	62	1300	80	0	130	0	310	130	390	270	150	100	69	1	51	1																
5	10	62	6400	0	40	440	0	20	510	4730	700	870	170	69	5	71	4	60	2	92	2	38	1										
5	23	62	1800	0	230	300	0	60	0	890	300	460	130	68	2	17	1	69	1	71	1												
6	6	62	5000	20	0	640	0	3070	180	970	90	140	20	51	5	68	2	63	1	25	1												
6	21	62	3400	660	0	500	0	660	370	830	330	210	40	3	3	51	2	63	1	69	1	25	1	92	1	54	1						
7	2	62	6700	1240	40	3350	0	4140	330	830	460	460	40	25	5	3	2	9	2	51	2	2	2	92	2	68	1	71	1	69	1		
7	16	62	2900	60	0	1390	0	190	60	660	580	290	170	25	3	68	2	38	1	69	1	88	1										
7	31	62	3200	0	0	850	0	750	0	1160	460	210	80	68	3	25	3	51	2	69	2	88	1										
8	20	62	5300	120	170	1610	0	1410	250	830	870	370	80	51	4	25	3	68	3	76	2	38	1	17	1	57	1	63	1				
9	5	62	800	50	0	450	0	50	20	50	180	90	70																				
9	18	62	2700	0	0	810	0	1120	210	460	120	460	40	51	3	25	3	68	1	69	1	63	1										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE FLORIDA
MAJOR BASIN SOUTHEAST
MINOR BASIN APALACHICOLA RIVER
STATION LOCATION APALACHICOLA RIVER AT
CHATTAHOOCHEE, FLORIDA 057

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA								
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			NUMBER PER LITER	1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	1ST		2ND		3RD		NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	4	61	23	28	57	23	56	13	27	12	24	0	0	258	17	5	22	4	16	4	11	3	18	2	4	51	1					0	0
10	18	61	27	23	82	20	23	17	57	16	24	2050	0	49	17	4	16	3	18	2	11	2	21	1	1							0	0
11	6	61	82	46	23	11	58	10	56	10	23	20	0	515	11	5	17	5	22	5	16	4	46	3	6	50	1					0	0
11	27	61	82	30	23	26	58	15	56	10	19	0	0	172	11	4	17	4	21	3	16	2			1							0	0
12	5	61	82	27	27	15	58	14	56	14	30	0	0	93	11	3	17	2	21	2	16	1	18	1	3	50	1					0	0
12	13	61	58	25	56	25	57	16	82	7	27	20	10	52	11	3	17	2	22	1	21	1			2							0	0
1	5	62										50	0	0											0							0	0
1	15	62										100	0	1											0							0	0
1	22	62										20	10	3											5	50	1					0	0
2	5	62										48400	0	0											0							0	0
2	19	62										150	0	4											0							0	0
3	5	62	27	27	57	14	2	8	56	7	44	0	0	1											2							0	0
3	19	62										20	0	2											8	53	2					0	0
4	2	62	57	32	82	27	61	11	2	5	25	0	10	0											0							0	0
4	16	62	57	41	82	21	61	8	56	7	23	0	10	1											0							0	0
5	10	62	57	55	82	37	56	3	92	1	4	0	0	846	17	6	46	6	22	5	11	5	21	5	12	51	2					1	0
5	23	62	57	45	28	21	82	10	56	6	18	40	10	1910	7	8	17	7	16	5	2	5	22	5	31	51	3	50	2			0	0
6	6	62	27	31	57	25	58	18	92	10	16	20	10	1120	17	7	18	6	11	4	22	4	7	4	6	51	1					0	2
6	21	62	27	32	57	21	56	14	58	10	23	20	10	843	22	7	15	5	17	5	18	4	7	4	9	50	1	51	1			0	0
7	2	62	56	27	57	26	58	18	28	8	21	40	0	1240	22	7	17	7	18	7	21	3	7	3	4	50	1					0	1
7	16	62	30	45	57	17	56	12	23	7	19	0	0	47	17	2	22	2	2	1					3							1	0
7	31	62	23	45	56	15	57	14	58	6	20	0	0	1100	22	7	17	7	18	5	15	4	2	4	8	50	1					2	0
8	20	62	23	44	57	16	8	10	56	8	32	0	0	905	22	7	17	5	18	5	7	4	16	4	0							0	0
9	5	62	57	17	56	15	23	14	8	11	43	0	0	567	22	6	18	5	15	4	17	4	7	4	3	52	1					0	0
9	18	62	23	30	82	12	57	9	56	9	40	0	0	657	22	6	17	6	2	4	18	4	21	3	1							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE FLORIDA
MAJOR BASIN SOUTHEAST
MINOR BASIN APALACHICOLA RIVER
STATION LOCATION APALACHICOLA RIVER AT
CHATTAHOOCHEE, FLORIDA 57

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	17	61	12	13	5720	90	25	65	0	6	8	1	1	6	0	3	2	1	5
1	2	62	2	9	3890	345	127	218	5	34	36	3	3	28	2	20	9	4	19
2	20	62	3	12	7390	149	68	81	3	16	14	1	1	11	1	8	7	1	19
4	3	62	4	23	5200	203	95	108	9	24	19	1	2	16	0	12	10	1	20
5	16	62	5	23	5210	117	58	59	2	17	13	1	1	11	0	7	6	1	12
6	12	62	6	26	5290	*	72	*	4	20	18	1	1	15	1	8	8	1	13
7	26	62	8	17	5370	174	62	112	1	16	19	2	1	15	1	8	4	1	13
9	5	62	9	21	5640	184	73	111	2	18	18	1	1	15	1	9	7	2	17

* LABORATORY ACCIDENT

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	FLORIDA
MAJOR BASIN	SOUTHEAST
MINOR BASIN	APALACHICOLA RIVER
STATION LOCATION	APALACHICOLA RIVER AT CHATTAHOOCHEE, FLORIDA 57

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	10	61	28.0	6.6	7.2	-	19	-	-	-	20	42	40	60	15	-	-	80	*100
10	16	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
10	23	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*100
10	30	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
11	6	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3000
11	13	61	28.0	7.2	7.2	-	-	-	-	-	14	44	36	50	20	4	.1	90	*100
11	20	61	30.0	9.0	7.1	1.4	-	-	-	-	14	42	38	60	20	-	-	80	300
11	27	61	30.0	7.4	7.2	-	-	-	-	-	16	42	36	80	20	4	.1	85	230
12	4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
12	12	61	30.0	7.4	7.1	-	-	-	-	-	14	45	40	90	25	-	-	90	-
12	18	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
1	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2500
1	15	62	30.0	4.0	6.8	-	-	-	-	-	4	35	32	60	30	-	-	80	1800
1	22	62	30.0	4.0	6.5	-	-	-	-	-	6	36	34	70	25	-	-	95	1800
1	29	62	26.0	6.0	6.9	-	-	-	-	-	8	38	36	65	20	-	-	80	-
2	5	62	24.0	6.0	6.9	-	-	-	-	-	6	40	38	90	30	-	-	80	790
2	9	62	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
2	12	62	26.0	4.0	7.0	-	-	-	-	-	-	44	42	60	20	-	-	85	*100
2	26	62	28.0	6.5	7.0	-	-	-	-	-	4	38	34	100	25	-	-	80	-
3	5	62	26.0	6.5	6.3	.9	-	-	-	-	2	21	26	150	25	-	-	64	210
3	12	62	28.0	6.4	6.4	1.0	8	-	-	-	4	22	28	125	20	4	.4	70	*100
3	26	62	20.0	8.7	6.6	-	-	-	-	-	6	24	30	150	20	-	-	80	100
4	2	62	24.0	6.0	6.8	-	-	-	-	-	4	22	28	120	20	-	-	80	*100
4	9	62	30.0	7.5	6.7	-	-	-	-	-	6	24	28	100	20	-	-	65	1700
4	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	13	.0	-	200
4	23	62	-	-	-	-	20	-	-	-	-	-	-	-	-	13	.0	-	*100
4	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*100
5	8	62	26.0	8.2	6.7	.7	-	-	-	-	3	47	36	100	20	-	-	85	*100
5	28	62	30.0	7.6	7.4	-	-	-	-	-	6	46	40	90	20	-	-	80	-
5	14	62	28.0	7.6	7.2	-	-	-	-	-	4	44	38	100	20	6	.0	90	-
5	21	62	-	-	-	-	-	-	-	-	-	-	-	-	-	5	.0	-	*100
6	1	62	-	-	-	-	-	-	-	-	-	-	-	-	-	4	.0	-	-
6	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*100
6	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-
6	18	62	30.0	7.6	7.2	-	-	-	-	-	4	44	42	100	20	-	-	90	-
6	25	62	28.0	7.0	7.4	-	-	-	-	-	6	44	38	90	20	-	-	80	*100
7	2	62	30.0	7.2	7.4	-	-	-	-	-	3	46	38	90	20	-	-	80	*100
7	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	3	.0	-	-
7	31	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*100

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE FLORIDA
MAJOR BASIN SOUTHEAST
MINOR BASIN APALACHICOLA RIVER
STATION LOCATION APALACHICOLA RIVER AT
CHATTAHOOCHEE, FLORIDA 57

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	6	62	30.0	6.5	7.4	-	-	-	-	-	4	44	40	80	20	-	-	100	*100
8	20	62	32.0	7.0	7.2	-	-	-	-	-	6	46	38	100	20	4	.0	90	-
8	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*130
9	4	62	30.0	7.0	7.2	-	-	-	-	-	4	48	42	120	20	-	-	85	100
9	10	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*130
9	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
9	18	62	30.0	7.0	7.4	-	-	-	-	-	6	56	48	140	20	-	-	90	-
9	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*130

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Chattahoochee, Florida
Operated by U.S. Geological Survey

STATE	Florida
MAJOR BASIN	Southeast
MINOR BASIN	Apalachicola River
STATION LOCATION	Apalachicola River at Chattahoochee, Florida

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	8.810	7.700	9.830	20.100	29.300	49.200	49.400	34.700	12.100	11.600	9.890	9.720
2	8.830	8.480	10.100	20.000	28.300	49.200	62.800	33.700	10.700	10.800	9.800	10.700
3	8.800	8.720	10.100	20.500	29.300	50.900	69.300	26.900	10.800	12.800	10.700	9.230
4	8.690	8.410	10.100	21.300	28.200	49.100	65.100	22.700	12.900	15.100	10.600	8.930
5	8.400	8.620	10.200	20.500	26.300	47.900	56.400	23.700	14.700	16.700	10.600	10.100
6	8.370	8.010	9.660	31.100	24.200	44.700	49.200	23.800	14.300	15.700	10.500	9.630
7	8.080	7.890	9.170	47.600	21.600	39.800	48.800	21.500	15.300	13.900	10.800	9.800
8	8.770	8.180	9.880	48.100	20.200	35.300	56.900	20.900	16.400	13.100	11.100	10.200
9	9.170	7.980	10.300	47.200	21.300	36.200	57.700	21.400	16.100	16.300	12.000	9.250
10	7.710	7.880	11.200	45.500	23.200	35.000	56.300	21.100	13.400	18.200	11.500	9.190
11	9.030	7.920	9.930	41.900	21.700	33.500	52.700	20.700	12.800	16.600	10.600	9.270
12	8.320	9.830	15.100	35.200	18.700	39.300	53.200	20.200	14.600	13.900	10.500	9.250
13	11.000	8.490	28.300	34.100	16.500	51.800	61.000	19.000	15.600	13.500	9.950	9.230
14	8.100	8.290	39.400	34.000	16.200	58.600	67.400	15.800	18.300	13.100	9.680	9.270
15	7.940	8.270	50.600	33.300	16.600	60.100	73.400	12.500	20.200	13.200	9.760	9.190
16	8.160	8.250	62.000	27.500	18.400	55.400	76.000	12.500	19.800	11.900	9.700	10.200
17	8.040	8.370	65.000	26.000	20.200	48.600	64.700	13.500	18.200	12.800	9.660	9.300
18	8.400	9.080	66.100	24.800	20.200	47.300	52.400	15.200	16.900	12.100	10.200	9.300
19	8.880	8.590	58.700	24.600	26.600	46.700	49.100	14.800	13.600	10.700	10.000	9.820
20	8.570	8.380	49.700	28.000	38.300	45.300	46.900	14.400	13.200	10.700	10.100	9.630
21	7.800	9.200	48.700	33.700	42.200	42.900	45.100	14.400	13.500	12.800	10.500	9.320
22	7.410	8.460	48.500	34.800	38.800	39.500	42.200	14.400	15.300	11.100	10.500	9.340
23	7.040	8.480	43.300	35.100	40.200	36.600	36.200	14.400	16.800	10.700	10.100	10.300
24	7.590	9.610	38.600	34.400	47.800	32.800	32.200	14.200	16.600	11.400	10.100	10.400
25	7.340	9.700	31.800	31.400	57.300	32.100	33.600	13.100	15.600	9.820	10.100	8.890
26	7.410	9.720	30.600	31.300	60.000	32.200	32.900	12.000	14.400	9.760	10.100	9.700
27	8.490	9.700	30.200	35.800	59.700	33.600	31.200	13.500	14.500	11.500	9.870	8.550
28	7.880	9.610	27.700	36.600	53.800	31.800	28.800	10.500	14.200	10.100	9.610	9.150
29	7.640	9.610	22.300	35.600		31.800	30.800	10.400	13.800	9.820	9.360	8.980
30	9.020	9.770	20.200	33.600		31.700	32.900	12.600	13.000	11.000	11.400	9.570
31	9.000		20.000	31.700		34.800		11.800		10.500	9.840	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	ARKANSAS
MAJOR BASIN	SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN	ARKANSAS RIVER VAN BUREN TO MOUTH
STATION LOCATION	ARKANSAS RIVER AT PENDLETON FERRY, ARKANSAS 52

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	300	0	0	20	0	40	0	170	80	20	170																				
10	9	61	200	0	0	40	0	20	0	160	0	70	160																				
10	16	61	400	0	0	60	0	130	20	120	80	150	40																				
11	6	61	8800	0	0	640	0	640	0	6940	540	1510	150																				
11	20	61	400	0	0	20	0	180	20	90	110	20	250																				
12	4	61	100	0	0	20	0	0	0	20	100	20	0																				
12	18	61	100	0	0	20	0	0	0	60	60	0	20																				
1	29	62	700	0	0	20	0	110	50	230	290	20	20	71	1																		
2	5	62	600	0	20	0	0	90	0	410	110	20	20	71	1																		
2	19	62	700	0	0	0	0	320	0	140	270	20	20	51	1																		
3	5	62	1100	0	0	20	0	110	50	690	200	50	160	71	2																		
3	26	62	31500	830	40	370	0	1330	250	26660	2030	9850	290	71	8	4	3	92	3	57	3	51	2	25	1	69	1	63	1	93	1		
4	16	62	17100	370	0	4600	*	1200	80	5340	1350	6090	580	50	5	25	5	68	5	71	4	51	3	57	2	69	2	92	2	88	2	3	2
4	23	62	4800	230	0	520	160	750	100	2300	770	970	250	71	4	68	2	51	2	92	1	74	1	57	1	25	1	50	1				
*4	16	62					4140																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ARKANSAS

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN ARKANSAS RIVER-VAN BUREN TO MOUTH

STATION LOCATION ARKANSAS RIVER AT

PENDLETON FERRY, ARKANSAS 052

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	58	41	56	11	26	6	80	5	37	0	0	0											0							0	0
10	9	61										0	0	0											0							0	0
10	16	61	58	80	26	10	80	5	56	1	4	0	0	0											0							0	0
11	6	61	58	45	80	43	26	7	56	4	1	0	0	0											0							0	0
11	20	61										470	0	0											0							0	0
12	4	61										0	0	0											0							0	0
12	18	61										0	0	0											0							0	0
1	29	62	92	22	83	16	62	7	95	6	49	140	0	0											0							0	0
2	5	62										140	0	0											0							0	0
2	19	62										0	0	0											0							0	0
3	5	62	83	41	95	14	82	10	92	6	29	290	0	0											0							0	0
3	26	62	83	36	82	20	92	18	95	3	23	210	0	16	2	2									0							0	0
4	16	62	26	29	80	20	92	8	82	8	35	0	0	152	2	5	11	3							1							0	0
4	23	62	92	22	4	21	82	8	80	8	41	0	20	59	2	3	11	3							3							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE ARKANSAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN ARKANSAS RIVER-VAN BUREN TO MOUTH
STATION LOCATION ARKANSAS RIVER AT
PENDLETON FERRY, ARKANSAS 52

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	4	61	10	14	-	-	-	-	-	-	90	41	15	8	105	42						
10	9	61	10	25	-	-	-	-	-	-	12	34	4	7	16	38						
10	16	61	10	30	-	-	-	-	-	-	22	17	11	13	33	20						
10	23	61	11	2	7	4	1	1	8	4	31	9	20	6	51	11						
10	30	61	11	9	-	-	-	-	-	-	42	17	23	12	65	21						
11	6	61	11	22	-	-	-	-	-	-	90	20	38	14	128	24						
11	13	61	11	29	-	-	-	-	-	-	120	15	31	8	151	17						
11	20	61	12	12	-	-	-	-	-	-	37	12	49	14	86	18						
11	27	61	12	11	7	4	0	0	7	4	87	11	9	5	96	13						
12	4	61	12	12	-	-	-	-	-	-	28	6	32	6	60	8						
12	18	61	12	29	3	2	1	1	4	2	47	9	36	8	83	12						
1	8	62	1	19	-	-	-	-	-	-	56	16	34	14	90	21						
1	29	62	2	9	2	2	0	1	2	2	85	9	43	8	128	12						
2	5	62	2	14	-	-	-	-	-	-	94	18	25	14	119	23						
2	12	62	2	23	-	-	-	-	-	-	151	20	41	19	192	28						
2	19	62	3	5	-	-	-	-	-	-	77	16	44	14	121	21						
2	26	62	3	14	2	4	3	2	5	4	91	15	33	10	124	18						
3	5	62	3	14	-	-	-	-	-	-	108	12	31	7	139	14						
3	12	62	3	26	-	-	-	-	-	-	76	9	33	8	109	12						
3	26	62	4	5	1	3	0	2	1	4	116	14	49	11	165	18						
4	2	62	4	19	-	-	-	-	-	-	194	16	49	5	243	18						
4	16	62	5	1	-	-	-	-	-	-	12	12	23	15	35	19						
4	23	62	4	30	2	2	2	2	4	3	55	10	39	11	94	15						
4	30	62	6	25	-	-	-	-	-	-	300	48	34	7	334	49						

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	ARKANSAS
MAJOR BASIN	SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN	ARKANSAS RIVER VAN BUREN TO MOUTH
STATION LOCATION	ARKANSAS RIVER AT
	PENDLETON FERRY, ARKANSAS 52

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	-	8.0	7.0	-	29	2.1	8.4	-	49	110	149	25	310	28	.0	-	-
10	9	61	21.0	8.3	7.0	3.0	44	1.0	5.4	-	52	220	149	120	270	28	.0	-	4600
10	16	61	21.0	7.5	7.8	2.1	-	.8	1.9	-	77	110	179	25	240	36	.0	382	1600
10	23	61	20.0	7.9	7.7	-	-	2.1	4.1	-	48	94	168	120	620	30	.0	327	-
10	30	61	-	7.7	7.7	1.5	-	.9	3.8	-	60	112	164	60	312	33	.0	297	-
11	6	61	13.0	9.2	7.9	3.0	25	-	-	-	98	124	188	50	144	51	.0	449	-
11	13	61	14.0	9.1	7.4	4.0	54	-	-	-	40	86	123	80	520	42	.0	-	-
11	20	61	11.0	10.6	7.7	1.2	32	-	-	-	101	116	175	35	174	55	.0	362	-
11	27	61	10.0	8.5	7.7	2.7	51	-	-	-	40	68	104	105	336	34	.0	224	-
12	4	61	11.0	9.9	7.4	3.4	47	-	-	-	68	74	110	80	174	36	.0	252	15000
12	18	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42000
1	8	62	5.0	9.4	7.7	3.8	23	-	-	-	119	132	-	50	186	47	.0	324	11000
1	29	62	6.0	11.6	7.0	4.4	-	-	-	-	52	62	74	80	210	33	.0	216	8000
2	5	62	9.0	10.6	7.6	3.4	66	-	-	-	118	96	170	70	225	57	.0	385	12000
2	12	62	12.0	10.5	7.4	4.5	28	-	-	-	112	102	166	40	264	51	.0	366	9000
2	19	62	12.0	-	7.0	-	33	-	-	-	113	84	160	25	174	58	.0	377	-
2	26	62	12.0	10.1	7.4	3.6	59	-	-	-	86	86	146	25	210	64	.0	278	5700
3	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2000
3	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6000
3	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2400
4	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6200
4	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8300
4	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Little Rock, Arkansas
Operated by U.S. Geological Survey

STATE	Arkansas
MAJOR BASIN	Southwest-Lower Mississippi River
MINOR BASIN	Arkansas River-Van Buren to Mouth
STATION LOCATION	Arkansas River at Pendleton Ferry, Arkansas

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	70.000	20.300	70.000	87.000	53.500	85.300	81.700	51.100	6.220	17.800	21.400	6.100
2	76.000	18.400	62.900	34.200	55.100	79.900	79.900	41.900	6.400	16.800	19.800	7.000
3	74.000	18.800	55.700	32.800	58.300	72.700	75.400	39.100	6.220	15.800	19.800	9.050
4	69.100	22.300	50.900	30.700	60.100	67.300	70.000	38.400	6.590	14.300	19.800	10.200
5	69.100	32.500	49.300	30.000	62.800	61.900	64.600	35.600	11.100	12.800	18.300	10.600
6	69.100	71.000	52.500	30.700	62.800	56.700	58.300	32.800	20.300	14.800	17.800	11.000
7	62.100	135.000	57.300	34.200	59.200	52.700	50.300	29.300	33.500	16.300	17.800	9.400
8	55.700	149.000	55.700	34.900	55.100	48.200	44.700	24.500	44.000	16.300	17.800	9.400
9	51.700	130.000	54.900	35.600	51.100	46.100	41.900	20.300	43.300	14.300	21.400	18.800
10	45.800	109.000	68.200	34.900	48.200	46.100	38.400	17.800	49.600	13.800	26.400	23.600
11	38.800	94.300	94.300	33.500	46.100	44.000	33.500	16.300	67.300	16.300	26.400	23.100
12	32.500	80.000	96.500	32.100	43.300	41.900	30.700	15.800	70.900	16.800	23.600	22.000
13	31.200	68.200	91.000	30.700	41.200	39.100	28.100	15.400	81.700	13.800	19.800	18.800
14	33.200	57.300	86.600	29.300	37.000	35.600	28.100	14.500	104.000	14.300	17.300	24.800
15	57.300	50.100	85.500	30.700	34.200	31.400	37.700	13.200	97.000	19.800	15.800	33.500
16	99.800	49.300	78.000	39.100	34.900	29.300	46.100	12.100	83.600	26.800	12.400	32.300
17	102.000	50.100	72.000	47.500	34.200	26.300	46.100	10.500	69.100	27.500	10.600	28.700
18	92.100	48.600	76.000	47.500	33.500	22.700	41.200	9.350	55.100	25.300	11.900	25.300
19	80.000	50.900	85.500	41.900	33.500	20.900	34.900	9.350	46.100	22.600	13.300	26.400
20	67.300	65.500	91.000	37.000	34.900	19.800	29.300	9.350	40.500	20.900	12.800	48.200
21	56.500	79.000	96.500	34.900	35.600	20.300	25.700	9.080	33.500	20.900	11.400	63.700
22	49.300	89.900	95.400	40.500	34.900	24.500	25.700	8.560	28.700	18.800	10.200	60.100
23	45.800	123.000	82.200	50.300	35.600	30.000	26.900	8.060	35.700	16.800	8.350	47.500
24	41.600	161.000	73.000	61.000	45.400	37.000	25.700	7.180	23.300	17.800	7.300	43.000
25	37.400	151.000	67.300	61.000	61.900	51.100	26.900	6.590	23.300	20.400	7.300	47.500
26	33.900	140.000	62.900	57.500	71.800	63.700	51.100	6.590	24.500	21.400	8.350	47.500
27	30.600	130.000	58.100	55.100	91.400	67.300	79.000	6.980	22.700	19.800	8.700	44.900
28	27.000	114.000	52.500	56.700	93.600	74.500	76.300	6.980	18.300	21.400	8.000	45.600
29	24.600	97.600	47.900	56.700		87.300	68.200	6.780	16.300	27.500	7.650	46.200
30	22.800	81.100	44.400	55.100		86.300	61.900	6.590	17.800	28.100	6.700	45.600
31	22.300		40.200	55.100		83.500		6.590		24.800	5.500	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE OKLAHOMA

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN ARK. RIVER, KANS-COLO LINE TO TULSA

STATION LOCATION ARKANSAS RIVER NEAR
PONCA CITY, OKLAHOMA

1

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
5	28	62	6	11	5320	134	58	76	1	14	22	3	2	17	0	8	4	1	8

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE OKLAHOMA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN ARK. RIVER, KANS-COLO LINE TO TULSA
STATION LOCATION ARKANSAS RIVER NEAR
PONCA CITY, OKLAHOMA 1

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	15	-	-	-	-	-	-	49	18	95	21	144	28						
10	9	61	10	18	-	-	-	-	-	-	24	23	39	27	63	35						
10	16	61	10	31	-	-	-	-	-	-	173	31	23	13	196	33						
10	23	61	11	1	2	3	10	6	12	7	61	24	39	25	100	35						
10	30	61	11	20	-	-	-	-	-	-	18	21	46	28	64	35						
11	6	61	11	27	-	-	-	-	-	-	108	10	116	9	224	13						
11	13	61	11	22	-	-	-	-	-	-	138	25	77	27	215	37						
11	20	61	11	30	-	-	-	-	-	-	191	20	84	15	275	25						
11	27	61	12	5	1	3	4	4	5	5	14	18	52	22	66	40						
12	4	61	12	12	-	-	-	-	-	-	53	28	63	35	116	45						
12	11	61	12	19	-	-	-	-	-	-	51	25	67	29	118	38						
12	18	61	12	27	-	-	-	-	-	-	63	25	78	30	141	39						
12	26	61	1	3	0	2	0	4	0	4	14	16	38	21	52	26						
1	2	62	1	10	-	-	-	-	-	-	15	28	2	34	17	44						
1	8	62	1	17	-	-	-	-	-	-	30	28	16	35	46	45						
1	15	62	1	22	-	-	-	-	-	-	37	28	38	35	75	45						
1	22	62	1	30	0	2	5	7	5	7	27	26	67	36	94	45						
1	29	62	2	12	-	-	-	-	-	-	308	25	87	17	395	30						
2	5	62	2	13	-	-	-	-	-	-	157	21	53	14	210	25						
2	12	62	2	27	-	-	-	-	-	-	12	29	52	37	64	47						
2	19	62	3	2	-	-	-	-	-	-	133	26	49	21	182	33						
2	26	62	3	6	0	3	2	4	2	5	47	22	78	27	125	35						
3	5	62	3	14	-	-	-	-	-	-	19	24	50	30	69	38						
3	12	62	3	23	-	-	-	-	-	-	12	29	1	35	13	45						
3	19	62	4	2	-	-	-	-	-	-	20	27	0	36	20	45						
3	26	62	4	5	0	3	1	6	1	7	20	21	34	27	54	34						
4	2	62	4	11	-	-	-	-	-	-	33	28	54	36	87	46						
4	9	62	4	20	-	-	-	-	-	-	26	27	76	34	102	43						
4	16	62	4	27	-	-	-	-	-	-	5	22	31	30	36	37						
4	23	62	5	23	0	2	2	6	2	6	52	37	252	49	304	61						
4	30	62	5	31	-	-	-	-	-	-	156	42	72	30	228	51						
5	7	62	6	5	-	-	-	-	-	-	37	34	44	43	81	55						
5	14	62	6	21	-	-	-	-	-	-	7	36	67	44	74	57						
5	21	62	6	25	-	-	-	-	-	-	39	18	46	21	85	28						
5	28	62	6	28	3	3	5	6	8	7	24	29	77	38	101	48						
6	4	62	7	3	-	-	-	-	-	-	680	72	60	9	740	73						
6	11	62	7	10	-	-	-	-	-	-	182	38	91	17	273	42						
6	18	62	7	10	-	-	-	-	-	-	171	32	63	30	234	44						
6	25	62	7	20	4	3	6	4	10	5	77	26	78	28	155	38						
7	2	62	8	1	-	-	-	-	-	-	45	57	68	41	113	55						
7	30	62	9	19	2	11	0	2	2	11	94	77	42	16	136	79						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	OKLAHOMA
MAJOR BASIN	SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN	ARK. RIVER, KANS-COLO LINE TO TULSA
STATION LOCATION	ARKANSAS RIVER NEAR PONCA CITY, OKLAHOMA 1

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	6	62	8	28	-	-	-	-	-	-	121	22	41	14	162	26						
8	13	62	8	24	-	-	-	-	-	-	45	80	36	18	81	82						
8	20	62	9	5	-	-	-	-	-	-	10	12	30	15	40	19						
8	27	62	9	11	19	21	1	4	20	21	284	105	42	20	326	123						
9	4	62	9	21	6	6	1	2	7	6	38	65	12	27	50	70						
9	10	62	10	9	-	-	-	-	-	-	128	120	49	16	177	121						
9	17	62	10	25	-	-	-	-	-	-	155	396	0	16	155	396						
9	24	62	10	16	21	24	1	1	22	24	280	154	21	7	301	154						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OKLAHOMA
MAJOR BASIN SOUTHWEST—LOWER MISSISSIPPI RIVER
MINOR BASIN ARK. RIVER, KANS-COLO LINE TO TULSA
STATION LOCATION ARKANSAS RIVER NEAR
PONCA CITY, OKLAHOMA 1

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	[illegible]	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	28900	0	40	850	0	990	0	25360	1640	1040	250	69	7	68	6	51	3	88	2	71	2	38	2	92	1	94	1	87	1	91	1
10	16	61	100	0	0	0	0	0	0	20	120	0	60																				
10	31	61	28800	0	0	480	0	1720	0	16150	10450	440	1530	69	7	68	5	88	5	71	5	74	5	51	4	91	3	92	2	89	2	87	2
11	20	61	300	0	0	20	0	40	0	20	180	40	180																				
12	4	61	2100	0	20	160	0	380	0	430	1130	160	410	68	2	88	2	51	1	91	1												
12	18	61	800	0	0	0	0	170	0	20	660	0	40	92	1	88	1																
1	2	62	1200	0	0	40	0	290	0	650	220	220	340	68	2	51	1																
1	15	62	1300	0	0	20	0	460	0	580	210	20	80	71	2	51	2																
2	5	62	700	0	0	0	0	70	0	20	650	90	920																				
2	19	62	3400	0	0	40	0	810	40	270	2220	40	330	92	4	51	2																
3	5	62	1800	0	0	70	0	780	310	220	380	200	690	51	3	63	2	91	1														
3	19	62	23700	460	290	460	0	13450	120	5220	3750	790	500	51	6	71	5	57	5	92	3	88	3	91	3	69	2	52	2	3	2	25	2
4	2	62	-	-	-	-	-	-	-	-	-	-	-																				
4	16	62	285900	27820	20	27200	210	16770	750	144070	69060	36550	7410	71	9	68	9	74	8	25	8	88	7	4	7	87	7	3	7	78	7	51	7
5	7	62	323500	9770	80	65910	*	2980	80	64130	164230	23810	17840	88	9	71	8	25	8	68	8	38	7	3	7	30	5	35	4	51	4	40	4
5	21	62	192900	2030	750	51050	80	790	0	82970	55230	13170	1950	68	9	88	8	78	7	25	7	38	7	24	7	3	4	91	4	87	4	30	4
6	4	62	2500	0	0	150	0	230	120	1100	910	100	40	68	2	71	2	92	1	88	1	78	1										
6	18	62	42300	410	80	4880	*	1530	80	21030	8940	5300	1330	68	7	50	6	88	4	38	4	91	4	24	4	78	3	25	3	69	3	51	3
7	2	62	105600	700	0	7330	*	1240	170	76420	17510	13080	1860	68	9	69	7	88	5	38	5	78	5	50	4	25	4	91	4	92	4	24	3
7	16	62	46800	40	0	950	120	540	40	32620	12460	10430	2360	68	8	69	6	88	6	78	4	92	4	91	3	38	3	66	3	87	3	71	2
8	6	62	3300	0	0	370	0	790	40	700	1410	120	210	68	3	51	2	88	2	38	1	52	1	97	1								
8	20	62	98500	1240	1040	48190	0	1280	0	30640	16150	8690	1660	71	9	68	9	24	8	25	6	38	5	88	4	12	3	87	3	88	3	2	3
9	4	62	3000	0	0	1350	0	320	0	610	740	1100	540	38	3	68	2	88	2	24	1	52	1	26	1								
9	17	62	100	0	0	10	0	0	0	30	40	80	230																				
*5	7	62					16350																										
*6	18	62					5340																										
*7	2	62					2240																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OKLAHOMA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN ARK. RIVER, KANS-COLO LINE TO TULSA
STATION LOCATION ARKANSAS RIVER NEAR
PONCA CITY, OKLAHOMA 001

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	26	27	73	8	58	6	68	6	53	0	0	0											0							0	0
10	16	61	55	18	5	12	26	9	56	7	54	0	0	0											0							0	0
10	31	61	4	17	5	12	71	11	72	5	55	0	0	0											0							0	0
11	20	61										20	0	0											0							0	0
12	4	61	85	14	73	12	65	7	68	6	61	160	0	0											0							0	0
12	18	61	92	23	71	8	73	6	87	4	59	0	0	0											0							0	0
1	2	62	92	22	71	9	85	8	73	8	53	20	0	0											0							0	0
1	15	62	86	18	92	10	4	6	95	6	60	20	0	0											0							0	0
2	5	62										20	0	0											0							0	0
2	19	62	92	80	36	5	33	3	71	3	9	60	0	0											0							0	0
3	5	62	85	27	92	17	71	9	12	6	41	20	0	0											0							0	0
3	19	62	92	30	71	11	85	11	86	7	41	0	0	0											0							0	0
4	2	62	92	32	71	10	85	9	82	9	40	0	0	9											0							5	0
4	16	62	82	53	26	30	4	5	12	2	10	0	0	5											3							2	0
5	7	62	67	54	82	26	26	8	23	8	4	990	0	722	2	8	15	1							22	76	3	50	2			5	0
5	21	62	26	71	30	15	12	3	23	2	9	620	0	394	11	7									1							-	-
6	4	62	92	26	12	17	71	13	72	6	38	0	0	-											-							-	-
6	18	62	26	58	12	12	58	5	87	4	21	80	0	30	2	3									0							0	0
7	2	62	26	61	12	5	71	4	30	4	26	0	0	86	22	4	2	3							0							0	0
7	16	62	26	47	58	10	12	5	92	5	33	80	0	-											-							-	-
8	6	62	26	22	73	16	92	7	87	5	50	60	0	-											-							-	-
8	20	62	84	46	26	30	58	5	71	2	17	0	0	0											0							0	0
9	4	62	26	55	23	10	82	5	58	3	27	0	0	3											0							0	0
9	17	62	26	27	64	7	71	5	82	5	56	0	0	-											-							-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE OKLAHOMA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN ARK. RIVER, KANS-COLO LINE TO TULSA
STATION LOCATION ARKANSAS RIVER NEAR
PONCA CITY, OKLAHOMA 1

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDN'SS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	15.5	-	8.2	-	-	-	-	-	282	194	300	20	220	88	.8	698	-
10	9	61	20.0	-	8.1	-	-	-	-	-	393	170	284	20	110	100	.7	710	-
10	16	61	18.0	-	8.0	-	-	-	-	-	119	130	162	20	300	-	-	-	-
10	23	61	16.0	-	8.4	-	-	-	-	-	393	250	359	20	60	97	.6	788	-
10	30	61	18.0	-	8.4	-	-	-	-	-	444	240	359	5	37	129	.5	880	-
11	6	61	8.0	-	8.1	-	-	-	-	-	68	110	137	10	600	30	.5	249	-
11	13	61	10.0	-	8.3	-	-	-	-	-	342	244	342	10	100	102	.5	725	-
11	20	61	9.0	-	7.9	-	-	-	-	-	103	140	157	10	600	20	.3	382	-
11	27	61	8.0	-	7.9	-	-	-	-	-	308	230	308	30	145	62	.0	732	-
12	4	61	12.5	-	8.3	-	-	-	-	-	397	240	376	20	100	119	.4	830	-
12	11	61	2.0	-	7.9	-	-	-	-	-	376	230	376	5	90	100	.3	811	-
12	18	61	.4	-	8.3	-	-	-	-	-	324	234	342	10	120	-	-	-	-
12	26	61	.2	-	7.9	-	-	-	-	-	384	230	324	10	90	-	-	-	-
1	2	62	.2	-	7.9	-	-	-	-	-	410	260	367	10	70	150	.3	989	-
1	8	62	.1	-	8.4	-	-	-	-	-	419	240	342	5	130	145	.5	877	-
1	15	62	-	-	7.9	-	-	-	-	-	316	154	492	20	250	225	.7	1127	-
1	22	62	.0	-	7.9	-	-	-	-	-	513	270	436	5	25	-	-	-	-
1	29	62	-	-	-	-	-	-	-	-	-	-	-	-	-	88	-	514	-
2	5	62	.4	-	7.9	-	-	-	-	-	171	128	171	20	230	-	-	-	-
2	12	62	.8	-	8.1	-	-	-	-	-	359	220	337	5	175	-	-	-	-
2	19	62	.6	-	7.9	-	-	-	-	-	325	204	320	10	175	-	-	-	-
2	26	62	.1	-	8.3	-	-	-	-	-	427	230	215	5	90	-	-	-	-
3	5	62	.1	-	8.1	-	-	-	-	-	280	250	402	5	95	195	-	1013	-
3	12	62	.4	-	8.3	-	-	-	-	-	-	244	402	10	90	195	.7	1016	-
3	19	62	1.3	-	8.3	-	-	-	-	-	195	232	406	10	32	225	.4	1061	-
3	26	62	1.1	-	8.3	-	-	-	-	-	-	220	393	5	25	200	.4	1008	-
4	3	62	1.8	-	8.4	-	-	-	-	-	260	208	384	10	50	210	.9	1061	-
4	9	62	11.0	-	8.3	-	-	-	-	-	292	170	376	5	60	250	.4	1039	-
4	16	62	11.0	-	8.3	-	-	-	-	-	-	140	320	5	73	-	-	-	-
4	23	62	15.0	-	8.3	-	-	-	-	-	-	160	342	10	40	-	-	-	-
4	30	62	18.0	-	8.3	-	-	-	-	-	270	140	324	20	170	350	.7	978	-
5	1	62	-	-	-	-	-	-	-	-	335	-	-	-	-	200	.7	1071	-
5	7	62	23.5	-	8.3	-	-	-	-	-	-	126	333	20	38	-	-	-	-
5	14	62	20.5	-	8.4	-	-	-	-	-	340	168	385	20	77	185	.9	1110	-
5	21	62	23.0	.0	8.3	-	-	-	-	-	384	180	385	20	80	205	.6	1244	-
5	28	62	24.0	-	8.3	-	-	-	-	-	350	144	342	20	90	185	.6	1151	-
6	4	62	20.0	-	7.7	-	-	-	-	-	45	74	115	10	1500	40	.2	-	-
6	11	62	24.0	-	8.3	-	-	-	-	-	104	122	171	20	250	65	.3	426	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL. PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	OKLAHOMA
MAJOR BASIN	SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN	ARK. RIVER, KANS-COLO LINE TO TULSA
STATION LOCATION	ARKANSAS RIVER NEAR PONCA CITY, OKLAHOMA 1

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	18	62	28.0	-	8.3	-	-	-	-	-	213	166	280	20	450	125	.0	704	-
6	25	62	26.0	-	8.4	-	-	-	-	-	235	136	298	15	190	140	.8	797	-
7	2	62	26.0	-	8.4	-	-	-	-	-	228	120	290	10	165	150	.0	782	-
7	9	62	32.0	-	7.5	-	-	-	-	-	186	148	325	10	300	100	.1	734	-
7	16	62	30.0	-	7.4	-	-	-	-	-	-	190	307	30	800	-	-	-	-
7	23	62	28.0	-	8.1	-	-	-	-	-	-	110	152	30	350	-	-	-	-
7	30	62	25.0	-	7.7	-	-	-	-	-	85	100	153	30	800	50	.4	357	-
8	6	62	28.0	-	8.1	-	-	-	-	-	138	134	240	20	1000	100	.8	553	-
8	13	62	26.5	-	7.9	-	-	-	-	-	130	134	168	10	800	85	.7	520	-
8	20	62	25.0	-	8.4	-	-	-	-	-	232	160	311	10	160	145	1.0	827	-
8	27	62	23.5	-	8.3	-	-	-	-	-	120	130	202	10	-	90	.0	504	-
9	3	62	25.0	-	8.2	-	-	-	-	-	-	136	205	20	800	-	-	-	-
9	4	62	25.0	-	8.2	-	-	-	-	-	205	160	260	10	173	120	1.0	700	-
9	10	62	17.0	-	8.1	-	-	-	-	-	145	124	196	10	310	75	.7	513	-
9	17	62	24.0	-	8.0	-	-	-	-	-	75	94	145	20	2000	18	.2	323	-
9	24	62	18.5	-	7.9	-	-	-	-	-	20	-	-	-	-	4	.4	218	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Ralston, Oklahoma
Operated by U.S. Geological Survey

STATE Oklahoma

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Ark. River, Kans-Colo Line to Tulsa

STATION LOCATION Arkansas River near
Ponca City, Oklahoma

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	6.460	4.720	6.190	4.200	22.100	3.000	3.000	3.520	12.700	3.400	4.630	2.120
2	5.650	28.500	5.920	4.100	20.200	2.800	2.900	3.400	11.800	2.900	6.420	2.030
3	5.780	74.700	5.650	4.100	17.300	2.900	2.710	3.100	9.200	2.620	7.000	2.150
4	5.280	94.500	5.520	4.000	14.200	3.500	2.800	2.710	22.000	2.360	6.320	1.910
5	4.520	57.800	5.400	4.000	11.000	3.700	2.800	2.620	29.300	2.280	5.780	1.970
6	4.100	32.300	5.150	4.200	9.200	3.700	2.800	2.540	26.000	2.120	5.150	3.300
7	3.700	19.500	5.020	4.200	7.750	3.600	2.800	2.360	21.100	2.260	5.280	3.900
8	3.400	13.800	4.900	4.200	6.860	3.700	2.710	2.280	16.400	11.300	5.650	4.100
9	3.200	11.400	6.320	4.000	6.190	3.500	2.710	2.200	16.000	9.760	5.920	4.100
10	8.500	9.550	7.900	3.400	5.780	3.400	2.710	2.120	15.500	10.600	6.190	3.600
11	57.600	8.680	8.350	1.800	5.400	3.300	2.710	2.020	12.600	8.770	5.400	3.600
12	63.800	8.050	7.150	1.800	5.280	3.300	2.710	1.920	9.900	8.350	4.520	3.700
13	45.500	7.750	6.060	2.800	5.020	3.300	2.620	1.800	8.680	9.900	4.100	3.700
14	38.900	7.600	5.020	3.400	4.900	3.400	2.620	1.720	7.300	7.150	3.600	3.200
15	25.800	10.500	4.400	3.400	4.900	3.500	2.540	1.660	6.460	5.520	3.400	2.800
16	16.400	18.500	4.650	3.400	5.020	3.300	2.450	1.600	6.190	5.400	3.000	2.540
17	11.800	22.900	6.190	3.400	5.150	3.200	2.450	1.520	5.650	12.000	2.710	4.220
18	8.200	27.300	9.200	3.400	6.600	3.100	2.360	1.480	5.020	10.600	2.540	12.500
19	6.730	23.400	9.900	3.400	6.600	3.000	2.360	1.420	4.520	9.550	2.400	8.900
20	5.780	16.700	10.600	2.800	5.650	3.000	2.280	1.380	4.100	7.900	2.200	6.060
21	5.150	13.400	8.850	1.800	5.150	3.000	2.280	1.350	3.800	6.860	2.070	4.100
22	4.650	11.800	6.730	1.800	4.780	2.900	2.360	1.260	3.600	5.920	1.950	5.860
23	4.200	10.200	5.920	1.800	4.520	2.900	2.280	1.260	3.600	4.900	1.820	6.750
24	4.000	9.550	5.650	2.200	4.300	3.300	2.200	1.280	3.300	5.020	1.780	16.400
25	3.700	8.500	5.280	2.800	4.200	3.900	2.200	1.240	3.500	6.650	1.750	15.500
26	3.500	7.900	5.280	3.800	4.100	4.000	2.360	1.260	4.200	9.900	1.840	9.420
27	3.300	7.300	4.900	5.500	3.800	3.500	2.280	1.260	3.600	7.120	1.920	8.050
28	3.100	6.860	4.900	8.500	3.400	3.300	2.360	1.270	3.600	5.780	2.860	7.450
29	3.000	6.460	4.780	12.000		4.100	2.560	1.430	3.800	5.150	2.620	6.320
30	3.000	6.320	4.780	21.000		3.500	2.920	2.870	3.800	4.900	2.120	5.650
31	3.400		4.520	24.000		3.200		2.600		4.600	2.030	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE KANSAS

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN ARK. RIVER, KANS-COLO LINE TO TULSA

STATION LOCATION ARKANSAS RIVER AT
COOLIDGE, KANSAS 2

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
4	24	62	5	4	3510	183	75	108	4	17	23	5	2	16	0	8	6	2	15
5	4	62	5	13	1862	485	69	416	3	19	20	5	2	13	0	6	5	1	15
6	4	62	7	2	3600	176	38	138	1	9	14	3	2	7	2	4	2	1	7
7	2	62	8	1	1363	296	57	239	1	17	17	3	2	11	1	6	3	1	12
8	1	62	9	10	4858	153	24	129	1	6	8	1	1	6	0	3	1	1	4
9	10	62	10	14	3996	284	43	241	1	14	7	1	1	4	1	4	4	0	13

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE KANSAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN ARK. RIVER, KANS-COLO LINE TO TULSA
STATION LOCATION ARKANSAS RIVER AT
COOLIDGE, KANSAS 2

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	11	6	8	46	24	52	25	66	49	90	63	156	80						
10	9	61	10	19	-	-	-	-	-	-	73	36	23	37	96	52						
10	13	61	10	24	-	-	-	-	-	-	154	62	80	76	234	98						
10	23	61	11	1	-	-	-	-	-	-	70	69	94	84	164	109						
10	30	61	11	6	-	-	-	-	-	-	93	61	109	77	202	98						
11	6	61	11	15	5	4	76	27	81	27	30	31	78	52	108	61						
11	14	61	11	27	-	-	-	-	-	-	45	47	102	85	147	97						
11	20	61	11	30	-	-	-	-	-	-	10	8	55	19	65	21						
12	26	61	1	3	4	6	42	23	46	24	20	43	89	61	109	75						
1	2	62	1	10	4	8	63	35	67	36	33	42	91	64	124	77						
1	8	62	1	17	-	-	-	-	-	-	239	47	362	71	601	85						
1	15	62	1	22	-	-	-	-	-	-	4	53	70	104	74	117						
1	23	62	1	31	-	-	-	-	-	-	11	52	94	85	105	100						
1	29	62	2	8	-	-	-	-	-	-	48	56	17	90	65	106						
2	5	62	2	13	0	5	45	26	45	26	4	42	76	62	80	75						
2	12	62	2	20	-	-	-	-	-	-	49	39	276	65	325	76						
2	19	62	3	26	-	-	-	-	-	-	0	46	33	94	33	105						
2	26	62	3	21	-	-	-	-	-	-	0	56	95	96	95	111						
3	5	62	3	16	6	6	91	35	97	36	0	40	96	65	96	76						
3	12	62	3	23	-	-	-	-	-	-	22	41	121	71	143	82						
3	19	62	3	30	-	-	-	-	-	-	20	59	29	96	49	113						
3	26	62	4	4	-	-	-	-	-	-	67	55	72	86	139	91						
4	2	62	4	11	2	22	15	5	17	23	33	37	26	61	59	71						
4	9	62	4	20	-	-	-	-	-	-	24	54	85	85	109	101						
4	16	62	4	27	-	-	-	-	-	-	0	78	76	82	76	113						
4	23	62	5	22	-	-	-	-	-	-	83	44	63	60	146	74						
4	30	62	5	31	-	-	-	-	-	-	48	77	198	107	246	132						
5	4	62	5	31	-	-	-	-	-	-	49	46	104	65	153	80						
5	14	62	6	21	5	6	37	23	42	-	126	75	118	100	244	125						
5	18	62	6	25	-	-	-	-	-	-	217	27	144	23	361	35						
5	28	62	7	2	-	-	-	-	-	-	96	60	131	81	227	103						
6	1	62	7	2	-	-	-	-	-	-	149	61	179	84	328	104						
6	11	62	7	11	42	23	14	14	56	27	253	83	60	72	313	110						
6	18	62	7	18	-	-	-	-	-	-	464	68	169	76	633	102						
6	25	62	7	19	-	-	-	-	-	-	817	104	94	42	911	112						
7	2	62	8	1	3	2	40	20	43	20	22	10	97	95	119	96						
8	1	62	8	17	-	-	-	-	-	-	257	53	79	17	336	56						
8	6	62	8	17	6	6	17	19	23	20	71	56	94	81	165	98						
8	13	62	10	13	-	-	-	-	-	-	50	57	90	79	140	97						
8	21	62	9	19	-	-	-	-	-	-	41	57	189	105	230	119						
8	27	62	10	11	-	-	-	-	-	-	0	64	25	99	25	118						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE KANSAS

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN ARK. RIVER, KANS-COLO LINE TO TULSA

STATION LOCATION ARKANSAS RIVER AT

COOLIDGE, KANSAS

2

DATE SAMPLE TAKEN					RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
9	4	62	9	18	0	5	40	28	40	28	60	48	101	83	161	96						
9	10	62	10	4	-	-	-	-	-	-	19	60	15	99	34	116						
9	17	62	10	9	-	-	-	-	-	-	22	61	25	104	47	121						
9	24	62	10	16	-	-	-	-	-	-	71	68	110	101	181	122						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE KANSAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN ARK. RIVER, KANS-COLO LINE TO TULSA
STATION LOCATION ARKANSAS RIVER AT
COOLIDGE, KANSAS 2

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	1800	0	0	100	0	40	0	120	1530	20	410	74	2	89	1																
10	13	61	3400	0	0	150	0	20	0	170	3020	0	20	87	3	88	3	80	1	74	1												
11	6	61	3500	0	120	60	0	120	0	170	3060	20	640	74	3	88	3	89	2	91	2	87	1										
11	20	61	1500	0	0	40	20	20	0	60	1330	0	230	88	1	89	1	91	1														
12	4	61	1500	0	0	0	0	0	0	60	1450	20	230	88	1	74	1	92	1	91	1												
12	18	61	900	0	0	0	0	0	0	20	830	0	20	88	1																		
1	2	62	800	0	0	0	0	0	0	20	750	0	40	88	1																		
1	15	62	100	0	0	0	0	20	0	0	180	50	90																				
2	5	62	2000	0	0	20	0	70	0	50	1850	20	160	92	2	88	1	91	1	89	1												
2	19	62	4000	0	0	20	0	790	0	20	3140	0	750	92	4	57	3	91	1														
3	5	62	3300	0	0	0	0	150	0	100	3080	40	580	92	4	88	2	91	2	87	1	78	1										
3	19	62	2200	0	0	20	0	90	400	0	1650	0	1540	92	3	65	2																
4	2	62	2200	0	0	0	0	100	0	20	2070	0	120	92	3	88	1	91	1	74	1	87	1	89	1								
4	16	62	5600	0	0	20	0	310	0	120	5130	20	660	88	3	91	3	87	3	74	3	92	2	78	2	86	1						
5	4	62	4300	0	20	170	0	210	0	100	3830	0	520	88	3	92	3	91	2	78	1	86	1	25	1								
5	18	62	100	0	0	0	0	0	0	0	90	20	110																				
6	1	62	6900	0	20	520	40	80	0	250	5960	80	950	88	4	92	3	87	3	89	3	91	3	74	2	25	1	68	1	78	1	73	1
6	18	62	4800	0	0	40	20	270	0	170	4350	0	560	88	3	87	3	89	2	92	2	86	1	57	1	91	1	74	1				
7	2	62	1900	0	0	60	0	520	40	120	1160	0	170	57	2	88	1	92	1	74	1												
7	16	62	11900	0	0	150	170	990	0	1390	9160	170	970	89	5	88	4	68	4	51	3	92	3	74	3	87	2	78	1	86	1	98	1
8	6	62	3700	0	0	0	130	250	0	1480	1790	210	110	68	3	69	2	51	1	92	1	88	1	74	1								
8	21	62	3700	0	0	0	0	0	0	40	3690	40	250	88	5																		
9	4	62	7000	0	0	0	0	40	0	80	6830	0	540	88	6	74	1	89	1														
9	17	62	4100	0	0	0	0	0	0	90	4050	90	970	88	5	74	2	92	2	87	1												

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE KANSAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN ARK. RIVER, KANS-COLO LINE TO TULSA
STATION LOCATION ARKANSAS RIVER AT
COOLIDGE, KANSAS 002

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																				
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	5	31	75	19	92	7	87	4	39	0	0	0											0							0	0
10	13	61										0	0	0											0							0	0
11	6	61	5	15	4	15	75	13	71	7	50	0	0	0											0							0	0
11	20	61	75	13	5	12	87	9	71	7	59	0	0	0											0							0	1
12	4	61	92	14	4	10	71	9	5	9	58	20	0	0											0							0	0
12	18	61	92	15	75	11	71	7	65	6	61	50	0	0											0							0	0
1	2	62	92	13	75	13	5	9	71	9	56	20	0	0											0							0	0
1	15	62	26	12	4	11	92	9	86	9	59	70	0	0											0							0	0
2	5	62	92	26	71	10	75	6	86	6	52	110	0	0											0							0	0
2	19	62	92	66	87	5	71	4	75	3	22	70	0	0											0							0	0
3	5	62	92	39	71	8	86	6	12	5	42	60	0	0											0							0	0
3	19	62	92	67	75	6	65	5	12	3	19	130	0	0											0							0	0
4	2	62	92	38	4	9	75	8	86	6	39	80	0	0											0							0	0
4	16	62	71	14	87	12	92	8	72	7	59	0	0	1											0							0	0
5	4	62	92	21	71	18	86	9	12	5	47	60	0	0											5	76	1					0	0
5	18	62										0	0	0											0							0	0
6	1	62	92	17	71	13	75	13	65	6	51	0	0	0											1							0	0
6	18	62	71	18	75	13	92	10	53	6	53	0	0	0											4	76	1					0	0
7	2	62	92	15	5	14	75	8	71	7	56	20	0	0											0							0	0
7	16	62	75	39	71	15	92	7	5	7	32	0	0	0											1							0	0
8	6	62	26	15	92	14	65	11	4	8	52	0	0	0											0							0	0
8	21	62	67	98	65	1					1	0	0	0											0							0	0
9	4	62	67	80	71	8	70	4	4	3	5	0	0	93	12	3	16	3	22	2	15	1			0							3	1
9	17	62	67	55	92	8	70	7	5	6	24	0	0	38	13	3	16	1							3	52	1					0	2

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE KANSAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN ARK. RIVER, KANS-COLO LINE TO TULSA
STATION LOCATION ARKANSAS RIVER AT
COOLIDGE, KANSAS 2

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALIN'TY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	-	-	7.4	-	-	-	-	-	118	210	1300	5	240	1900	.0	3160	-
10	9	61	-	-	7.4	-	-	-	-	-	110	196	1200	5	500	1750	.0	2897	-
10	23	61	-	-	8.0	-	-	-	-	-	128	216	1390	5	650	1900	.1	3304	-
10	30	61	-	-	7.8	-	-	-	-	-	112	212	1330	-	270	1562	.0	3072	-
11	6	61	-	-	7.7	-	-	-	-	-	130	212	1420	5	280	2100	.0	3480	-
11	14	61	-	-	-	-	-	-	-	-	144	212	1530	5	0	2200	.0	3765	-
11	20	61	-	-	7.7	-	-	-	-	-	-	166	1400	-	-	2250	.2	3482	-
11	27	61	-	-	7.9	-	-	-	-	-	84	194	1030	15	-	1300	.2	2271	-
12	26	61	-	-	-	-	-	-	-	-	-	143	240	5	110	2200	.0	3865	-
1	2	62	-	-	7.6	-	-	-	-	-	140	180	1550	5	50	2300	.0	3906	-
1	8	62	-	-	7.6	-	-	-	-	-	141	-	1968	5	75	2500	.0	3820	-
1	15	62	-	-	-	-	-	-	-	-	168	-	1670	-	-	1150	-	4162	-
1	22	62	-	-	7.4	-	-	-	-	-	154	222	1670	5	-	2375	.3	-	-
1	29	62	-	-	7.5	-	-	-	-	-	130	-	1460	5	120	2050	.0	3556	-
2	5	62	-	-	-	-	-	-	-	-	138	198	1570	-	-	2300	.0	3962	-
2	12	62	-	-	-	-	-	-	-	-	138	196	1566	-	-	2300	.0	3923	-
2	26	62	-	-	-	-	-	-	-	-	155	184	1720	5	0	2400	.0	4170	-
3	5	62	-	-	-	-	-	-	-	-	135	204	1408	5	-	2250	.0	3798	-
3	12	62	-	-	-	-	-	-	-	-	156	112	1660	5	-	2500	.0	4031	-
3	26	62	-	-	-	-	-	-	-	-	146	198	1620	5	*25	2500	.0	3987	-
4	9	62	16.0	-	8.2	-	-	-	-	0	153	212	1592	15	0	2250	.0	4047	-
4	30	62	-	-	-	-	-	-	-	-	96	228	1340	0	275	1800	.0	3172	-
5	4	62	-	-	-	-	-	-	-	-	112	212	1330	0	180	1900	.0	3260	-
5	14	62	-	-	7.6	-	-	-	-	-	147	200	1412	5	25	2000	.0	3775	-
5	28	62	-	-	-	-	-	-	-	-	115	204	1352	5	112	1950	.0	3441	-
6	1	62	-	-	-	-	-	-	-	-	125	204	1480	-	58	1750	.0	3318	-
6	25	62	-	-	-	-	-	-	-	-	62	180	352	10	5000	1050	.2	2120	-
7	2	62	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-	-
8	1	62	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
8	6	62	-	-	-	-	-	-	-	-	122	180	1310	5	25	1900	.0	3322	-
8	13	62	-	-	-	-	-	-	-	-	95	172	488	5	28	1700	.0	2990	-
8	21	62	-	-	-	-	-	-	-	-	298	184	1370	0	25	2000	.1	3500	-
8	27	62	-	-	8.2	-	-	-	-	-	278	102	1440	0	*25	2100	.0	3730	-
9	10	62	-	-	-	-	-	-	-	-	144	164	630	5	25	1900	.0	3285	-
9	24	62	-	-	-	-	-	-	-	-	164	184	612	5	5000	2200	.0	3990	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Coolidge, Kansas
Operated by U.S. Geological Survey

STATE	**Kansas**
MAJOR BASIN	**Southwest-Lower Mississippi River**
MINOR BASIN	**Ark. River, Kans-Colo Line to Tulsa**
STATION LOCATION	**Arkansas River at** **Coolidge, Kansas**

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.220	.127	.155	.128	.202	.100	.118	.390	.288	.066	.676	.0029
2	.146	.180	.140	.121	.180	.110	.114	.378	.336	.075	.408	.0031
3	.137	.240	.128	.121	.150	.125	.118	.282	.402	.128	.270	.0036
4	.151	.185	.140	.132	.145	.150	.124	.185	.440	.091	.160	.0079
5	.156	.151	.155	.132	.150	.155	.132	.132	.372	.104	.118	.0068
6	.166	.151	.165	.135	.160	.155	.132	.100	.372	.294	.091	.0052
7	.175	.132	.175	.135	.160	.155	.110	.075	.578	.282	.072	.0041
8	.166	.118	.170	.124	.165	.145	.107	.056	.592	.276	.121	.0063
9	.175	.114	.165	.070	.165	.128	.097	.040	.571	.132	.202	.084
10	.513	.114	.130	.065	.145	.121	.091	.029	.537	.100	.234	.042
11	.255	.121	.100	.080	.135	.118	.270	.012	.504	.118	.288	.023
12	.286	.124	.080	.100	.132	.110	.426	.0090	.426	.128	.282	.019
13	.280	.121	.080	.100	.145	.124	.426	.0090	.402	.081	.107	.025
14	.265	.118	.110	.093	.140	.135	.348	.025	.288	.061	.072	.027
15	.260	.150	.130	.087	.155	.155	.300	.027	.264	.045	.064	.023
16	.275	.180	.132	.084	.150	.145	.306	.042	.218	.053	.056	.020
17	.260	.170	.135	.081	.145	.135	.324	.107	.196	.104	.047	.012
18	.240	.175	.136	.078	.150	.132	.282	2.650	.218	.084	.038	.0079
19	.215	.180	.134	.075	.140	.118	.288	1.330	.175	.045	.040	.0085
20	.180	.165	.135	.073	.140	.118	.306	.498	.128	.165	.031	.016
21	.190	.160	.134	.071	.165	.118	.300	.324	.114	.104	.0090	.027
22	.175	.155	.137	.068	.170	.140	.288	.300	.081	.072	.0074	.027
23	.156	.150	.150	.087	.175	.145	.288	.354	.081	.114	.0052	.042
24	.156	.140	.145	.106	.170	.132	.360	.348	.218	.229	.0047	.022
25	.132	.135	.150	.125	.135	.118	.342	.306	.390	.128	.0041	.016
26	.118	.135	.165	.144	.090	.114	.330	.252	.196	.104	.0041	.017
27	.142	.132	.160	.163	.060	.110	.336	.252	.240	.537	.0034	.015
28	.156	.140	.128	.183	.070	.107	.348	.240	.264	.870	.0031	.017
29	.161	.145	.124	.204		.104	.390	.229	.160	.420	.0027	.016
30	.137	.165	.132	.224		.100	.426	.185	.091	.414	.0024	.017
31	.137		.140	.202		.114		.202		.396	.0027	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IDAHO
MAJOR BASIN GREAT BASIN
MINOR BASIN GREAT SALT LAKE
STATION LOCATION BEAR RIVER ABOVE
PRESTON, IDAHO

125

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
9	10	62	1100	0	0	40	0	0	380	170	510	40	510	63	2																		
9	24	62	900	10	0	100	0	60	0	650	130	60	350	68	2																		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IDAHO
MAJOR BASIN GREAT BASIN
MINOR BASIN GREAT SALT LAKE
STATION LOCATION BEAR RIVER ABOVE
PRESTON, IDAHO

125

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
9	10	62	16	9	36	9	65	9	56	7	66	0	0	1											0							0	0
9	24	62	26	40	92	7	80	6	16	6	41	0	0	2											0							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE IDAHO

MAJOR BASIN GREAT BASIN

MINOR BASIN GREAT SALT LAKE

STATION LOCATION BEAR RIVER ABOVE
PRESTON, IDAHO

125

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	20	62	9	5	0	1	2	2	2	2	0	34	34	16	34	38						
8	27	62	9	14	0	1	1	3	1	3	6	9	29	15	35	17						
9	4	62	9	21	0	1	1	2	1	2	11	9	46	14	57	17						
9	10	62	9	27	1	1	2	3	3	3	29	14	45	19	74	24						
9	17	62	10	10	0	1	0	2	0	2	5	9	30	16	35	18						
9	24	62	10	18	0	1	0	3	0	3	0	13	33	16	33	21						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE IDAHO
MAJOR BASIN GREAT BASIN
MINOR BASIN GREAT SALT LAKE
STATION LOCATION BEAR RIVER ABOVE
PRESTON, IDAHO

125

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END						ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL			TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS				
8	17	62	9	17	5000	127	37	90	1	9	17	3	2	12	0	3	2	1	5

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE IDAHO
MAJOR BASIN GREAT BASIN
MINOR BASIN GREAT SALT LAKE
STATION LOCATION BEAR RIVER ABOVE
PRESTON, IDAHO 125

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	20	62	–	–	–	–	–	–	–	–	46	312	336	5	–	70	.0	463	–
8	27	62	–	–	–	–	–	–	–	–	50	328	344	10	–	76	.0	498	–
9	4	62	–	–	–	–	–	–	–	–	51	320	364	10	25	78	.1	511	–
9	10	62	–	–	–	–	–	–	–	–	52	324	348	10	25	76	.0	510	–
9	17	62	–	–	–	–	–	–	–	–	57	332	348	10	*25	9	.1	532	–
9	24	62	–	–	8.2	–	–	–	–	–	58	340	390	10	*25	75	.0	570	–

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Preston, Idaho
Operated by U.S. Geological Survey

STATE	Idaho
MAJOR BASIN	Great Basin
MINOR BASIN	Great Salt Lake
STATION LOCATION	Bear River above Preston, Idaho

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.357	.273	.466	.295	.489	.610	.710	1.590	.459	.633	.712	.556
2	.292	.263	.371	.303	.433	.980	.625	1.320	.513	.632	.479	.309
3	.197	.433	.130	.337	.467	.490	1.100	1.300	.325	.671	.437	.705
4	.363	.210	.379	.364	.171	.402	1.050	1.340	.444	.742	.414	.574
5	.368	.166	.484	.361	.421	.483	1.120	1.320	.555	.858	.332	.728
6	.265	.280	.422	.337	.569	.536	1.490	1.200	.473	1.070	.398	.542
7	.257	.260	.488	.281	.444	.445	1.430	1.050	.418	1.360	.319	.478
8	.285	.236	.472	.405	.400	.604	1.690	1.300	.350	1.150	.404	.465
9	.454	.304	.299	.531	.541	.497	1.670	1.040	.408	1.380	.457	.287
10	.128	.462	.182	.365	1.540	.633	1.510	1.470	.487	1.120	.427	.248
11	.260	.108	.419	.423	3.790	.534	1.720	1.220	.481	.963	.537	.149
12	.202	.154	.213	.381	3.940	.527	1.470	1.220	.398	.946	.500	.187
13	.409	.371	.221	.387	3.260	.562	1.660	.861	.287	.924	.540	.143
14	.282	.316	.266	.242	2.020	.657	1.670	1.070	.198	.902	.442	.186
15	.239	.394	.290	.364	1.800	.573	1.480	1.070	.157	.618	.536	.159
16	.248	.382	.281	.347	1.490	.402	1.620	.992	.123	.747	.451	.099
17	.245	.461	.167	.397	1.230	.545	1.480	.920	.172	.691	.660	.231
18	.317	.232	.233	.433	1.110	.202	1.720	.832	.133	.510	.420	.143
19	.336	.130	.245	.406	.930	.349	1.280	.367	.137	.490	.552	.151
20	.246	.213	.571	.509	.813	.560	1.650	.168	.222	.546	.550	.192
21	.351	.436	.706	.120	.933	.609	1.520	.521	.306	.653	.553	.141
22	.152	.524	.601	.444	.765	.788	1.400	.393	.400	.624	.768	.139
23	.397	.136	.170	.397	.589	.583	1.580	.278	.391	.521	.603	.209
24	.188	.364	.122	.370	.728	.597	1.630	.248	.319	.466	.705	.181
25	.281	.370	.183	.388	.348	.293	1.820	.347	.450	.471	.745	.158
26	.267	.266	.471	.425	.689	.658	1.720	.253	.602	.472	.734	.138
27	.351	.412	.493	.380	.885	.791	1.610	.194	.896	.457	.637	.196
28	.372	.363	.371	.322	1.040	.874	1.830	.362	.658	.469	.613	.171
29	.227	.474	.415	.336		.721	1.550	.424	.575	.465	.738	.246
30	.245	.425	.366	.539		.662	1.440	.482	.620	.516	.688	.202
31	.308		.194	.451		.826		.419		.465	.693	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MONTANA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN YELLOWSTONE RIVER
STATION LOCATION BIG HORN RIVER AT
HARDIN, MONTANA 104

DATE OF SAMPLE			TOTAL	ALGAE (Number per milliliter)								INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
				BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
12	18	61	100	0	0	0	0	0	0	20	70	0	50																				
1	2	62	100	0	0	0	0	0	0	0	90	0	110																				
1	15	62	100	0	0	0	0	50	0	0	50	20	50																				
2	5	62	400	0	0	0	0	0	0	50	380	0	0																				
2	19	62	700	0	0	0	0	20	0	50	630	0	230	87	1	82	1																
3	5	62	2200	0	0	0	0	40	1990	60	120	0	20	60	4																		
3	19	62	700	0	0	0	0	20	0	60	620	0	170	82	1																		
4	2	62	1000	0	0	0	0	50	0	20	930	0	140	87	2	85	1																
4	16	62	4300	0	0	20	0	170	20	1590	2550	390	480	71	4	92	3	82	3	87	2												
5	7	62	3100	0	0	190	0	20	0	460	2420	0	60	82	3	71	2	92	2	85	1	38	1	91	1								
5	21	62	1000	0	20	70	0	0	50	380	510	160	160	71	2																		
6	4	62	700	0	0	20	0	0	20	200	420	50	720	71	1																		
6	18	62	200	0	0	20	0	40	0	50	70	20	0																				
7	2	62	2400	20	0	40	0	600	0	250	1530	40	330	57	2	82	2	92	2	71	1	87	1										
8	6	62	800	0	0	0	0	0	0	120	700	0	0																				
8	20	62	2100	80	0	40	0	390	0	330	1200	0	40	87	3	68	1	51	1	92	1	52	1										
9	4	62	500	0	0	30	0	10	0	10	470	0	810	87	1																		
9	17	62	900	0	0	140	0	80	0	150	490	20	1690	87	1																		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MONTANA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN YELLOWSTONE RIVER
STATION LOCATION BIG HORN RIVER AT
HARDIN, MONTANA 104

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
12	18	61										70	0	0											0							1	0
1	2	62										0	0	1											1							0	0
1	15	62	92	14	36	13	65	10	47	5	58	20	0	0											0							0	0
2	5	62	92	16	36	9	75	7	16	6	62	110	0	0											0							0	0
2	19	62										0	0	0											0							0	0
3	5	62	36	16	47	14	92	9	65	6	55	0	0	0											0							1	0
3	19	62	36	43	92	16	15	6	65	6	29	20	0	0											0							0	0
4	2	62										20	0	0											0							0	0
4	16	62	92	32	36	27	65	12	51	4	25	20	0	3											0							0	0
5	7	62	36	28	92	13	80	10	65	6	43	0	0	0											4							0	0
5	21	62										50	0	0											0							0	0
6	4	62	36	20	65	16	80	11	92	7	46	20	0	0											0							0	0
6	18	62										0	0	-											-							-	-
7	2	62	47	32	80	18	36	13	92	12	25	40	0	-											-							-	-
8	6	62	16	24	32	15	65	14	47	7	40	0	0	-											-							-	-
8	20	62	65	15	47	13	92	12	66	12	48	0	0	0											0							0	0
9	4	62	65	20	66	11	36	10	64	8	51	0	0	0											0							0	0
9	17	62	65	29	36	18	33	7	64	6	40	0	0	4											0							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MONTANA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN YELLOWSTONE RIVER
STATION LOCATION BIG HORN RIVER AT
HARDIN, MONTANA

104

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
12	26	61	1	4	1	1	10	6	11	6	8	8	27	13	35	15						
1	2	62	1	12	0	2	6	5	6	5	12	17	36	22	48	28						
1	8	62	1	19	1	2	8	6	9	6	18	17	29	21	47	27						
1	15	62	1	29	1	3	10	6	11	7	17	17	40	21	57	27						
1	22	62	2	8	0	1	11	5	11	5	5	8	30	13	35	15						
1	29	62	2	12	0	3	5	4	5	5	66	19	48	20	114	28						
2	5	62	2	15	9	5	5	4	14	7	53	22	59	21	112	30						
2	12	62	2	27	6	9	0	5	6	10	74	30	47	26	121	40						
2	19	62	3	8	18	13	3	4	21	14	143	20	47	13	190	24						
2	26	62	3	13	1	1	7	4	8	4	64	11	33	13	97	17						
3	5	62	3	19	0	2	7	5	7	5	13	23	17	27	30	35						
3	12	62	3	26	4	3	13	5	17	6	28	12	39	13	67	18						
3	19	62	4	2	8	6	6	3	14	7	42	16	23	14	65	21						
3	26	62	4	10	16	12	1	4	17	13	104	32	24	21	128	38						
4	2	62	4	17	17	11	7	5	24	12	51	27	38	21	89	34						
4	9	62	4	26	0	3	2	5	2	6	43	21	30	23	73	31						
4	16	62	5	23	3	3	11	6	14	7	30	25	29	27	59	37						
4	23	62	7	11	30	20	6	4	36	15	201	54	36	16	237	56						
4	30	62	6	6	20	11	9	4	29	12	66	41	33	16	99	44						
5	7	62	6	13	4	5	6	4	10	7	38	24	24	19	62	31						
5	14	62	6	25	19	10	4	3	23	10	110	14	43	9	153	17						
5	21	62	6	26	18	32	5	4	23	32	523	72	115	30	638	78						
5	28	62	7	11	30	26	8	5	38	26	247	61	48	16	295	63						
6	4	62	7	5	43	23	5	4	48	23	165	80	39	16	204	82						
6	12	62	7	13	7	5	7	4	14	7	33	36	19	10	52	37						
6	18	62	7	17	0	21	1	1	1	21	1580	301	32	16	1612	301						
6	25	62	7	24	0	39	2	2	2	39	32	39	23	13	55	41						
7	2	62	8	1	13	16	5	3	18	16	131	78	55	9	186	79						
7	9	62	8	6	4	4	2	2	6	4	46	21	37	17	83	27						
7	16	62	8	16	472	260	4	4	476	260	336	63	92	18	428	66						
7	23	62	8	21	6	5	1	5	7	7	49	17	45	16	94	23						
7	28	62	9	6	20	17	3	4	23	17	205	55	45	34	250	65						
8	6	62	8	27	11	21	3	4	14	21	227	42	48	5	275	42						
8	13	62	8	30	143	85	6	4	149	85	900	230	76	28	976	232						
8	20	62	9	6	1	3	6	6	7	7	16	24	60	28	76	37						
8	27	62	9	14	7	5	6	5	13	7	50	33	25	34	75	47						
9	4	62	9	20	0	2	3	4	3	4	13	22	44	30	57	37						
9	10	62	10	2	0	1	4	4	4	4	6	15	42	21	48	26						
9	17	62	10	15	3	3	10	5	13	6	21	15	29	18	50	23						
9	24	62	10	23	22	21	6	4	28	21	289	145	54	28	343	148						

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MONTANA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN YELLOWSTONE RIVER
STATION LOCATION BIG HORN RIVER AT
HARDIN, MONTANA

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
11	19	61	2.0	-	8.4	-	-	-	-	-	-	-	420	-	30	-	-	-	-
11	25	61	3.0	-	8.6	-	-	-	-	-	-	-	370	-	53	-	-	-	-
12	26	61	-	-	-	-	-	-	-	-	15	186	-	10	-	325	.1	718	-
1	2	62	2.5	-	8.6	-	-	-	-	-	-	190	360	-	30	-	-	-	-
1	8	62	3.0	-	8.6	-	-	-	-	-	13	200	360	5	45	269	.0	697	-
1	15	62	2.0	-	8.6	-	-	-	-	-	12	280	384	-	25	306	.0	673	-
1	22	62	2.5	-	8.6	-	-	-	-	-	13	220	400	-	10	325	.0	851	-
1	29	62	2.5	-	8.6	-	-	-	-	-	13	200	340	16	50	338	.0	701	-
2	5	62	.0	-	8.6	-	-	-	-	-	15	180	304	-	475	312	.0	695	-
2	12	62	2.0	-	8.6	-	-	-	-	-	14	180	340	10	550	300	-	-	-
2	19	62	1.0	-	8.6	-	-	-	-	-	11	140	320	10	1500	312	.0	616	-
2	26	62	.5	-	8.6	-	-	-	-	-	15	212	392	10	28	325	.0	-	-
3	5	62	1.0	-	8.6	-	-	-	-	-	16	220	300	5	35	337	-	633	-
3	12	62	1.0	-	8.6	-	-	-	-	-	-	160	288	-	350	-	-	-	-
3	19	62	5.0	-	8.6	-	-	-	-	-	22	168	280	5	3000	265	.0	632	-
3	26	62	8.0	-	8.6	-	-	-	-	-	14	180	320	10	2000	350	.0	726	-
4	2	62	8.5	-	8.4	-	-	-	-	-	16	180	340	5	1500	362	.0	781	-
4	9	62	8.0	-	8.6	-	-	-	-	-	18	220	440	10	440	463	.0	891	-
4	16	62	14.0	-	8.6	-	-	-	-	-	17	180	360	5	200	370	-	803	-
4	23	62	16.0	-	8.4	-	-	-	-	-	7	180	300	-	2000	290	.0	554	-
4	30	62	12.0	-	8.4	-	-	-	-	-	13	170	260	10	825	250	.1	620	-
5	7	62	12.0	-	8.6	-	-	-	-	-	13	180	260	10	625	275	.0	600	-
5	14	62	13.5	-	8.4	-	-	-	-	-	9	104	228	15	550	238	.0	484	-
5	21	62	16.5	-	8.6	-	-	-	-	-	16	148	292	10	2000	337	.0	710	-
5	28	62	19.0	-	8.6	-	-	-	-	-	-	180	200	-	9000	-	-	-	-
6	4	62	16.0	-	8.4	-	-	-	-	-	10	160	280	10	1500	275	.0	635	-
6	11	62	20.0	-	8.6	-	-	-	-	-	11	150	300	20	600	312	.0	710	-
6	18	62	23.0	-	8.6	-	-	-	-	-	-	180	250	-	9000	-	-	-	-
6	25	62	26.0	-	8.6	-	-	-	-	-	15	140	185	10	2000	150	-	449	-
7	2	62	23.5	-	8.6	-	-	-	-	-	-	128	140	-	1000	-	-	-	-
7	9	62	23.0	-	8.6	-	-	-	-	-	10	120	170	5	270	30	-	377	-
7	16	62	21.5	-	8.6	-	-	-	-	-	11	190	250	5	9000	287	.0	707	-
7	23	62	25.0	-	8.6	-	-	-	-	-	9	180	300	15	600	300	.0	689	-
7	28	62	24.0	-	8.6	-	-	-	-	-	12	260	380	10	2000	388	.0	828	-
8	6	62	24.0	-	8.6	-	-	-	-	-	12	170	308	10	1500	338	-	-	-
8	13	62	27.5	-	8.6	-	-	-	-	-	12	240	340	-	7500	350	.0	742	-
8	20	62	26.0	-	8.6	-	-	-	-	-	14	250	340	10	260	350	.0	772	-
8	27	62	20.0	-	8.6	-	-	-	-	-	-	220	330	-	550	-	-	-	-
9	4	62	16.0	-	8.6	-	-	-	-	-	13	260	340	5	270	363	.0	750	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MONTANA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN YELLOWSTONE RIVER
STATION LOCATION BIG HORN RIVER AT
HARDIN, MONTANA 104

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
9	10	62	18.0	-	8.6	-	-	-	-	-	12	180	320	5	140	350	.0	720	-
9	17	62	18.5	9.4	8.6	-	-	-	-	-	-	180	340	-	140	-	-	-	-
9	24	62	17.5	8.6	8.6	-	-	-	-	-	-	180	320	-	2000	-	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near St. Xavier, Montana
Operated by U.S. Geological Survey

STATE Montana

MAJOR BASIN Missouri River

MINOR BASIN Yellowstone River

STATION LOCATION Big Horn River at
Hardin, Montana

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	2.730	2.310	2.800	2.400	2.400	2.920	4.280	4.700	4.870	11.400	3.720	2.880
2	2.750	2.480	2.760	2.500	2.620	3.360	4.280	4.470	5.100	10.500	3.880	2.800
3	2.750	2.520	2.760	2.600	3.120	3.560	3.600	4.250	5.270	9.640	4.130	2.870
4	2.740	2.560	2.840	2.500	3.080	3.520	2.800	4.020	5.540	9.460	3.990	2.920
5	2.720	2.700	2.800	2.300	3.520	3.780	2.400	3.850	6.170	8.570	3.720	2.990
6	2.840	2.730	2.700	2.400	3.280	3.400	2.300	3.760	5.640	7.680	3.480	2.990
7	2.980	2.760	2.660	2.300	3.280	3.640	2.300	3.760	5.140	7.030	3.310	2.880
8	2.680	2.880	2.620	2.100	3.080	4.360	2.700	4.060	4.970	7.040	3.030	2.830
9	2.640	2.840	2.070	1.800	3.120	5.150	3.400	4.190	4.730	5.820	2.750	3.180
10	3.040	2.880	1.710	1.600	3.320	6.620	3.700	4.280	4.520	5.020	2.600	3.770
11	5.400	2.920	1.100	2.000	3.600	6.050	3.700	4.350	4.760	4.790	5.220	3.630
12	4.000	3.040	.900	1.900	3.960	5.050	3.600	4.170	5.260	4.210	4.050	3.350
13	3.320	3.000	1.000	1.700	4.590	4.280	3.600	3.950	6.060	4.270	3.660	3.180
14	3.080	2.920	1.300	1.500	10.600	4.280	3.700	3.670	6.640	7.350	3.420	2.990
15	2.880	2.880	1.800	1.400	11.500	4.100	3.900	3.330	6.860	8.680	3.130	2.950
16	2.700	2.880	2.200	1.400	6.300	4.320	4.300	3.390	8.960	5.180	2.790	2.910
17	2.560	2.700	2.400	1.300	4.320	4.680	4.500	3.210	8.420	5.180	2.680	2.880
18	2.620	2.560	2.300	1.200	3.640	5.700	4.500	3.140	6.740	4.240	2.560	2.800
19	2.620	2.480	2.200	1.000	4.050	5.000	4.300	3.150	6.320	4.100	2.500	2.700
20	2.520	2.420	2.300	1.000	3.740	5.050	4.400	3.150	7.590	3.910	2.330	2.690
21	2.590	2.660	2.400	1.000	3.280	5.150	4.700	3.230	7.990	3.470	2.240	2.730
22	2.620	2.660	2.200	1.000	2.840	5.200	5.100	3.500	8.370	2.960	2.100	3.190
23	2.730	2.730	2.300	1.100	2.240	5.050	5.400	3.660	8.790	2.640	2.130	3.700
24	2.520	2.730	2.400	1.400	1.770	4.770	5.200	3.780	9.640	2.460	2.650	3.840
25	2.340	2.760	2.300	1.600	1.800	4.640	5.200	3.820	11.400	2.300	2.540	3.590
26	2.450	2.800	2.000	1.800	1.900	4.500	5.500	4.640	12.300	2.180	2.510	3.500
27	2.450	2.760	1.800	2.000	2.000	4.460	5.400	8.080	12.000	2.360	2.440	3.500
28	2.450	2.800	1.800	2.100	2.200	4.540	5.300	6.120	12.500	3.620	2.440	3.500
29	2.450	2.800	2.000	2.200		4.680	5.200	5.660	12.900	3.410	2.570	3.460
30	2.380	2.730	2.100	2.200		4.590	4.880	4.850	11.600	3.410	2.860	3.420
31	2.280		2.200	2.300		4.320		4.790		3.420	2.880	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	SOUTH DAKOTA
MAJOR BASIN	MISSOURI RIVER
MINOR BASIN	BIG SIOUX RIVER
STATION LOCATION	BIG SIOUX RIVER BELOW SIOUX FALLS, SOUTH DAKOTA 80

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	4	61	10	18	0	2	0	4	0	4	0	26	57	34	57	43						
10	11	61	10	25	3	2	6	4	9	4	92	12	177	16	269	20						
10	18	61	11	2	1	2	3	5	4	5	12	19	50	27	62	33						
10	25	61	11	2	0	2	3	5	3	5	11	20	17	27	28	34						
11	1	61	11	10	0	2	4	5	4	5	41	17	96	24	137	29						
11	8	61	11	24	2	2	3	4	5	4	79	20	227	32	306	38						
11	15	61	11	28	0	2	0	4	0	4	1	22	100	30	101	37						
11	22	61	11	30	1	2	0	3	1	4	54	20	147	28	201	34						
11	29	61	12	6	6	5	2	3	8	6	92	16	66	14	158	21						
12	6	61	12	14	1	2	1	3	2	4	28	17	35	22	63	28						
12	13	61	12	21	0	2	0	5	0	5	15	21	98	30	113	37						
12	20	61	1	2	0	2	1	5	1	5	10	20	43	27	53	34						
12	27	61	1	9	5	4	48	13	53	14	57	20	65	27	122	34						
1	3	62	1	15	2	3	1	6	3	7	11	20	37	29	48	35						
1	10	62	1	18	5	5	4	7	9	9	37	39	39	47	76	61						
1	17	62	1	30	0	5	2	10	2	11	223	47	61	54	284	72						
1	23	62	2	7	1	5	5	8	6	9	20	38	36	48	56	61						
2	7	62	2	16	0	2	3	5	3	6	56	17	174	26	230	31						
2	14	62	3	1	0	2	0	4	0	4	64	14	162	21	226	25						
2	21	62	3	8	0	1	1	3	1	3	111	12	240	16	351	20						
2	28	62	3	13	2	2	4	5	6	5	63	17	195	26	258	29						
3	7	62	3	19	0	2	0	4	0	5	28	19	104	28	132	34						
3	14	62	3	28	1	2	2	5	3	5	42	20	88	27	130	34						
3	21	62	4	4	0	3	2	5	2	6	56	20	103	27	159	34						
3	28	62	4	10	55	45	0	1	55	45	701	90	139	86	840	124						
4	4	62	4	20	4	3	0	1	4	3	30	7	94	7	124	10						
4	11	62	4	27	2	1	1	1	2	1	44	6	78	67	122	9						
4	18	62	4	30	1	1	5	3	6	3	7	8	71	12	78	14						
4	25	62	6	1	2	1	3	3	5	3	15	14	61	18	76	23						
5	9	62	6	15	0	1	5	4	5	4	9	10	59	16	68	19						
5	16	62	6	22	0	1	0	1	0	1	17	7	79	8	96	11						
5	20	62	6	25	1	1	5	3	6	3	5	9	43	13	48	16						
5	23	62	6	29	2	3	0	3	2	4	143	17	108	15	251	23						
5	31	62	7	2	1	3	1	2	2	4	85	30	99	15	184	34						
6	6	62	7	6	2	2	3	3	5	4	39	12	108	16	147	20						
6	12	62	7	12	-	-	-	-	-	-	38	32	100	18	138	37						
6	20	62	7	17	0	3	1	3	1	4	6	26	75	16	81	31						
6	27	62	7	25	0	1	4	3	4	3	7	12	74	16	81	20						
7	3	62	8	6	-	-	-	-	-	-	17	10	63	12	80	16						
7	11	62	8	13	-	-	-	-	-	-	49	11	103	12	152	16						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE SOUTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN BIG SIOUX RIVER
STATION LOCATION BIG SIOUX RIVER BELOW
SIOUX FALLS, SOUTH DAKOTA 80

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	18	62	8	16	0	0	1	2	1	2	26	13	93	17	119	21						
7	25	62	8	21	-	-	-	-	-	-	28	18	48	18	76	25						
8	1	62	8	23	-	-	-	-	-	-	16	12	44	15	60	19						
8	8	62	8	28	-	-	-	-	-	-	23	13	72	17	95	21						
8	15	62	8	31	-	-	-	-	-	-	4	28	31	9	35	29						
8	22	62	9	6	1	3	4	4	5	5	40	28	60	17	100	33						
8	29	62	9	27	-	-	-	-	-	-	1	15	33	20	34	25						
9	5	62	9	28	-	-	-	-	-	-	55	16	70	20	125	26						
9	12	62	10	9	-	-	-	-	-	-	31	23	70	18	101	29						
9	18	62	10	15	1	1	1	3	2	3	27	11	49	17	76	20						
9	26	62	10	18	-	-	-	-	-	-	18	21	70	28	88	35						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	SOUTH DAKOTA
MAJOR BASIN	MISSOURI RIVER
MINOR BASIN	BIG SIOUX RIVER
STATION LOCATION	BIG SIOUX RIVER BELOW SIOUX FALLS, SOUTH DAKOTA 80

DATE OF SAMPLE			ALGAE *(Number per milliliter)*									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED *(Pigmented)*		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	11700	0	0	270	0	290	0	10390	770	520	80	71	5	68	6	69	3	88	2	38	1	69	1								
10	18	61	3400	20	20	290	0	580	0	2050	460	150	100	68	3	71	3	51	2	88	1												
11	8	61	13600	50	90	1050	0	400	0	11910	130	4960	250	71	7	38	2	25	2	57	2	68	2										
11	20	61	8100	140	410	680	0	650	70	5380	770	1550	140	71	6	51	2	25	2	12	2	68	1	69	1	87	1	88	1				
12	6	61	12600	0	130	100	0	390	0	11550	480	440	120	71	7	68	4	57	2	88	1												
12	20	61	4000	110	230	50	0	410	0	2900	290	140	0	71	5	68	2	57	1	51	1												
1	2	62	2200	20	70	40	0	70	0	1920	50	110	20																				
1	17	62	700	20	20	0	0	0	0	580	120	40	20	71	1																		
2	7	62	3600	0	1940	50	0	160	0	1010	500	230	50	71	3	16	3	11	3	12	2	88	1	68	1	51	1						
2	22	62	1800	0	250	0	0	110	70	1180	200	160	110	16	1																		
3	7	62	800	120	190	0	0	230	0	210	100	40	20	15	1	51	1																
3	21	62	300	0	110	20	0	70	0	20	50	90	50																				
3	28	62	16400	0	0	110	0	390	0	8570	7350	160	410	71	6	88	5	87	4	68	4	69	3	84	2	92	2	55	2	82	1	85	1
4	18	62	8700	1770	250	250	0	1500	320	4090	460	1060	740	68	5	2	4	51	4	17	1	61	1	88	1								
5	2	62	54400	670	2530	20170	*	930	680	20970	7170	8900	1650	71	7	38	7	92	6	24	5	68	5	25	5	17	5	50	4	34	3	59	3
5	23	62	18100	0	0	11480	0	130	0	2620	3880	1350	1560	38	6	24	5	71	4	92	4	88	3	68	1	80	1	91	1				
6	6	62	5500	0	0	700	0	40	0	2660	2110	1010	1220	71	4	92	3	68	3	88	2	38	2										
6	20	62	17700	2070	0	5050	120	3770	290	3970	2440	1410	460	51	5	25	4	92	4	24	4	3	4	38	3	2	3	88	2	62	1	44	1
7	3	62	16400	870	290	6920	80	1490	80	4600	2030	1700	750	68	5	25	4	38	4	51	4	3	3	24	3	30	2	35	2	45	2	44	2
7	11	62	7100	160	40	2690	0	620	40	1990	1570	1040	620	68	3	25	3	88	3	51	2	71	2	30	2	92	2	24	2	38	2	69	1
8	1	62	6100	120	80	1700	0	350	40	2150	1700	210	330	68	4	25	3	69	3	38	2	88	2	92	2	51	1	71	1	24	1	79	1
8	15	62	59700	1270	1650	3670	420	80	40	43150	9390	6960	2430	68	8	71	6	88	5	87	4	92	3	69	3	12	3	44	3	2	3	38	3
9	5	62	22900	630	360	9910	0	290	0	7020	4680	6750	2250	68	6	24	6	88	4	38	4	27	4	25	3	3	2	71	2	15	2	26	1
9	17	62	135800	6830	3480	65410	170	580	80	52790	6420	12830	1450	68	9	38	8	24	8	71	6	25	6	88	5	10	5	12	4	1	4	69	4
*5	2	62					1270																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE SOUTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN BIG SIOUX RIVER
STATION LOCATION BIG SIOUX RIVER BELOW
SIOUX FALLS, SOUTH DAKOTA 080

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																		NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA								
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	4	61	82	32	26	31	58	10	56	6	21	1740	10	66	22	4	15	1	11	1					0							37	1
10	18	61	26	32	82	29	56	9	70	7	23	3100	0	68	1	4	20	1							0							12	0
11	8	61	82	86	26	3		1		1	9	850	10	286	22	6	15	2	2	1					0							37	0
11	20	61	82	89	26	3		1		1	6	160	0	4											0							10	0
12	6	61	82	69	26	7	70	4	92	2	18	20	10	42	22	3	15	1							0							18	0
12	20	61	82	61	26	13	92	6	71	4	16	410	20	25	22	3									1							16	0
1	2	62	82	58	26	12	92	10	71	3	17	70	0	0											0							0	0
1	17	62	82	63	26	14	70	5	71	3	15	7180	0	0											0							15	0
2	7	62	82	37	26	10	71	8	70	6	39	560	10	1											0							69	0
2	22	62										1380	10	1											0							69	0
3	7	62	82	38	26	15	71	7	70	4	36	250	30	3											0							330	0
3	21	62	82	30	26	17	71	5	72	4	44	650	10	0											0							180	0
3	28	62										230	0	0											0							0	0
4	18	62	26	20	71	14	92	10	69	5	51	0	0	0											0							0	0
5	2	62	82	49	92	38	26	8	70	2	3	40	0	5											1							2	0
5	23	62	82	28	92	20	83	15	26	5	32	0	10	24	15	1	2	1							12	50	2					0	0
6	6	62	92	31	83	17	71	15	26	10	27	0	0	3											3							0	0
6	20	62	92	52	71	10	26	6	80	4	72	0	0	7											0							2	0
7	3	62	26	29	92	10	71	8	21	5	48	0	0	3											0							0	0
7	11	62	58	23	26	19	92	11	82	8	39	0	0	0											0							0	0
8	1	62	58	51	26	26	82	5	92	3	15	0	0	0											0							0	0
8	15	62	26	43	58	15	82	8	70	2	32	40	0	128	2	5	11	3	22	1					0							0	0
9	5	62	26	58	58	28	82	4	71	2	8	0	0	1											0							0	0
9	17	62	26	57	58	18	82	12	27	4	9	0	0	71	2	4	15	2	11	1	18	1			0							9	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL. PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE SOUTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN BIG SIOUX RIVER
STATION LOCATION BIG SIOUX RIVER BELOW
SIOUX FALLS, SOUTH DAKOTA 80

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	4	61	13.3	.0	7.3	25.0	216	-	-	5.6	213	264	388	20	35	223	13.2	1027	9700M
10	11	61	13.9	1.4	7.6	46.0	116	-	-	.6	81	196	310	30	39	190	.7	636	1200M
10	18	61	10.3	.0	7.4	94.0	224	-	-	12.8	210	258	300	45	13	226	12.8	1000	3300M
10	25	61	9.5	.0	7.4	.0	192	-	-	12.0	219	273	446	40	35	235	15.6	1023	13000M
11	1	61	1.1	.0	7.2	100.0	164	-	-	.8	161	233	332	40	23	198	12.4	875	17000M
11	8	61	.3	4.9	7.5	100.0	208	-	-	.8	129	263	426	20	18	233	8.6	894	11000M
11	15	61	.5	4.7	7.6	10.0	144	-	-	1.2	125	259	416	25	23	235	8.4	851	15000M
11	22	61	.9	5.0	7.7	72.0	116	-	-	2.0	143	238	418	40	17	222	7.4	813	4700M
11	29	61	.5	5.3	7.7	92.0	104	-	-	.6	125	245	422	40	21	233	6.6	752	12000M
12	6	61	4.3	4.7	7.8	122.0	132	-	-	.2	155	240	400	40	3	229	9.4	877	33000M
12	13	61	.6	4.8	7.6	118.0	232	-	-	5.2	227	265	268	40	24	266	13.6	1116	2000M
12	20	61	.3	5.1	7.6	120.0	204	-	-	.8	270	280	426	40	-	270	12.6	1192	13000M
12	27	61	1.1	1.9	7.4	240.0	180	-	-	5.4	247	293	460	40	13	282	19.1	1156	
1	3	62	.5	.4	7.4	125.0	244	-	-	6.0	254	312	480	40	15	300	22.0	1216	11000M
1	10	62	.0	.2	7.6	240.0	424	-	-	16.8	321	316	482	40	35	307	34.0	1338	
1	17	62	.5	.5	7.4	380.0	472	-	-	15.6	348	340	482	30	15	279	32.0	1572	51000M
1	24	62	.5	.0	7.2	360.0	876	-	-	20.6	280	342	446	40	22	294	30.0	1636	33000M
1	31	62	1.4	.4	7.4	300.0	456	-	-	21.0	430	347	428	30	22	288	18.4	1564	120000M
2	7	62	1.5	4.8	7.3	170.0	300	-	-	1.8	187	238	346	30	29	216	11.6	936	120000M
2	14	62	3.5	7.1	7.5	84.0	152	-	-	.8	111	215	330	40	18	188	7.5	732	95000M
2	21	62	2.2	7.0	7.5	270.0	224	-	-	.8	110	186	272	100	20	131	6.4	578	33000M
2	28	62	1.0	5.3	7.5	138.0	256	-	.1	5.6	247	231	320	90	18	169	11.6	948	850M
3	7	62	2.5	1.8	7.3	130.0	244	-	-	3.6	242	256	376	50	20	220	10.8	556	4600M
3	14	62	.5	2.4	7.4	205.0	264	-	-	2.0	273	281	380	45	18	290	12.6	1076	110M
3	21	62	4.5	2.1	7.3	215.0	220	-	-	1.2	215	256	374	30	16	201	8.4	954	1300M
3	28	62	1.5	7.4	7.8	48.0	148	-	-	1.6	15	72	86	45	650	27	.1	147	*100M
4	4	62	2.5	11.4	7.2	14.0	56	-	-	.6	5	152	118	40	275	109	1.0	191	*100M
4	11	62	3.5	11.2	7.7	7.0	80	-	-	1.6	8	132	170	40	190	31	.8	210	*10M
4	18	62	8.0	10.9	7.7	6.0	40	-	-	.4	17	161	300	30	90	178	.1	382	30M
4	25	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120M
5	2	62	14.0	8.4	8.0	5.6	56	-	-	.4	31	214	356	25	45	169	.1	633	3400M
5	9	62	14.6	7.3	8.1	2.0	56	-	-	.6	41	246	426	10	64	214	.1	662	*100M
5	16	62	20.8	7.0	7.8	4.4	48	-	-	.4	40	219	360	40	120	228	.1	556	*100M
5	23	62	16.8	8.2	7.8	3.2	88	-	-	.4	22	174	274	25	350	118	.1	469	1100M
5	31	62	15.8	8.8	7.8	5.6	16	-	-	.4	8	190	290	25	210	114	.0	501	-
6	6	62	17.0	8.0	8.2	1.6	9	-	-	2.6	21	231	330	25	150	129	.0	478	*100M
6	13	62	21.0	7.6	7.6	3.2	9	-	-	2.2	15	223	332	35	140	124	.8	435	*10M
6	20	62	21.6	7.4	7.6	-	10	-	-	5.5	6	228	318	35	100	330	.9	511	*10M
6	27	62	23.1	7.1	8.7	2.4	10	-	-	2.0	6	257	330	25	110	246	1.3	494	40M

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE SOUTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN BIG SIOUX RIVER
STATION LOCATION BIG SIOUX RIVER BELOW
SIOUX FALLS, SOUTH DAKOTA 80

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	2	62	24.5	6.6	7.8	7.2	8	-	-	2.8	5	245	340	20	110	306	.8	500	-
7	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300M
7	11	62	24.5	7.3	7.9	2.0	4	-	-	4.2	4	195	320	25	155	270	1.0	460	480M
7	18	62	21.6	7.5	8.3	7.2	-	-	-	3.0	36	231	328	35	130	303	.8	588	220M
7	25	62	23.2	7.3	8.1	7.2	34	-	-	1.4	21	250	344	35	130	300	.8	504	450M
8	1	62	21.6	7.3	8.2	2.8	66	-	-	2.0	21	246	376	25	155	451	.6	610	4800M
8	8	62	25.5	6.4	8.3	10.8	60	-	-	4.2	24	260	394	20	135	-	.9	629	480M
8	15	62	22.6	6.8	8.5	6.0	65	-	-	4.0	33	260	410	20	100	-	1.2	647	2300M
8	22	62	24.1	6.8	8.5	3.5	73	-	-	6.4	37	252	406	20	97	221	1.4	646	1600M
8	29	62	21.4	6.6	8.5	5.2	80	-	-	4.4	41	256	448	20	150	220	.7	638	*20M
9	5	62	20.4	7.4	8.3	3.2	64	-	-	2.4	38	250	392	20	100	201	.8	691	200M
9	12	62	12.5	6.3	8.4	5.6	71	-	-	1.2	39	243	390	25	100	197	1.0	66*	*20M
9	19	62	14.0	7.1	8.3	5.6	59	-	-	2.2	42	249	400	20	100	209	.8	777	110M
9	26	62	15.3	6.2	8.2	11.2	56	-	-	1.1	49	257	412	20	150	208	.8	671	250M

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Brandon, South Dakota
Operated by U.S. Geological Survey

STATE	South Dakota
MAJOR BASIN	Missouri River
MINOR BASIN	Big Sioux River
STATION LOCATION	Big Sioux River below Sioux Falls, South Dakota

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.039	.039	.050	.025	.035	.025	13.000	.610	1.580	.868	1.100	.373
2	.039	.095	.044	.025	.055	.020	10.800	.593	1.490	.880	1.040	.360
3	.039	.065	.076	.030	.070	.020	9.530	.593	1.440	.992	1.000	.359
4	.038	.059	.066	.030	.060	.020	7.870	.576	1.420	1.090	.972	.372
5	.033	.046	.044	.030	.075	.015	6.250	.540	1.500	1.700	.940	.360
6	.034	.046	.051	.030	.055	.020	5.190	.502	1.520	1.940	.904	.345
7	.031	.055	.039	.030	.030	.030	4.320	.486	1.620	1.790	.848	.324
8	.027	.051	.047	.030	.025	.035	3.740	.474	2.090	1.860	.836	.383
9	.028	.052	.051	.025	.020	.030	3.320	.453	2.160	2.070	.816	.375
10	.057	.052	.040	.020	.015	.025	2.990	.405	1.890	2.420	.812	.351
11	.079	.049	.045	.020	.010	.025	2.580	.456	1.800	2.460	.764	.330
12	.041	.047	.045	.025	.030	.025	2.160	.444	1.740	2.690	.730	.315
13	.038	.049	.045	.025	.025	.025	1.870	.625	1.700	2.540	.719	.291
14	.038	.049	.040	.025	.020	.025	1.730	.784	1.660	2.270	.698	.276
15	.036	.054	.040	.020	.085	.020	1.620	.712	1.600	2.140	.670	.261
16	.038	.055	.040	.015	.105	.020	1.580	.565	1.580	2.210	.635	.252
17	.041	.052	.035	.015	.255	.025	1.480	.512	2.000	2.080	.600	.234
18	.041	.055	.035	.015	.440	.030	1.570	.530	2.140	1.940	.558	.219
19	.036	.040	.035	.015	.430	.035	1.400	.520	1.860	1.960	.523	.210
20	.039	.044	.035	.015	.435	.033	1.250	.593	1.570	2.140	.496	.202
21	.036	.051	.035	.015	.330	.039	1.130	.688	1.430	2.390	.474	.196
22	.033	.054	.030	.015	.250	.047	1.020	1.540	1.320	2.200	.450	.188
23	.032	.045	.030	.020	.160	.051	.944	1.300	1.210	2.040	.435	.180
24	.038	.045	.025	.020	.090	.058	.876	1.400	1.130	1.940	.411	.180
25	.039	.047	.025	.025	.070	.066	.812	1.640	1.080	1.900	.393	.174
26	.033	.046	.025	.020	.020	.164	.740	1.400	1.030	1.880	.378	.167
27	.033	.042	.025	.015	.040	.657	.716	1.270	.960	1.820	.366	.162
28	.037	.045	.020	.015	.030	3.640	.666	1.500	.900	1.580	.363	.155
29	.105	.051	.020	.020		8.370	.635	1.650	.848	1.390	.354	.172
30	.044	.051	.020	.030		9.940	.624	1.610	.800	1.270	.484	.205
31	.039		.025	.030		15.500		1.600		1.170	.399	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
COLUMBUS, GEORGIA

59

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																	RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	11	-	-	-	-	-	-	0	4	5	4	5	6						
10	16	61	10	25	-	-	-	-	-	-	2	5	1	5	3	7						
10	23	61	11	1	-	-	-	-	-	-	0	5	0	5	0	7						
10	30	61	11	7	-	-	-	-	-	-	0	5	5	5	5	7						
11	6	61	11	16	0	0	0	1	0	1	3	4	3	4	6	6						
11	13	61	11	22	-	-	-	-	-	-	0	5	1	5	1	7						
11	20	61	11	30	-	-	-	-	-	-	0	5	11	6	11	8						
11	27	61	12	6	-	-	-	-	-	-	8	5	11	5	19	7						
12	4	61	12	12	0	0	0	1	0	1	12	6	9	5	21	8						
12	11	61	12	21	-	-	-	-	-	-	16	6	9	6	25	8						
12	18	61	12	28	-	-	-	-	-	-	16	6	15	5	31	8						
12	26	61	1	3	-	-	-	-	-	-	18	7	22	5	40	9						
1	2	62	1	15	0	1	0	1	0	1	13	6	13	5	26	8						
1	8	62	1	30	-	-	-	-	-	-	42	6	50	10	92	12						
1	15	62	1	24	-	-	-	-	-	-	31	5	21	4	52	7						
1	22	62	1	31	-	-	-	-	-	-	61	7	26	6	87	9						
1	29	62	2	7	-	-	-	-	-	-	45	12	2	10	47	16						
2	6	62	2	23	1	1	1	1	2	1	33	5	20	4	53	6						
2	12	62	2	23	-	-	-	-	-	-	16	5	12	5	28	7						
2	19	62	3	2	-	-	-	-	-	-	21	4	17	4	38	6						
2	26	62	3	12	-	-	-	-	-	-	68	13	15	5	83	14						
3	5	62	3	16	0	1	0	1	0	1	32	6	13	5	45	7						
3	12	62	4	3	-	-	-	-	-	-	85	8	37	6	122	10						
3	19	62	3	30	-	-	-	-	-	-	60	8	23	6	83	10						
3	26	62	4	4	-	-	-	-	-	-	47	7	23	5	70	9						
5	11	62	7	25	-	-	-	-	-	-	1	5	11	6	12	8						
5	21	62	6	26	-	-	-	-	-	-	0	8	11	6	11	10						
5	28	62	6	29	-	-	-	-	-	-	0	4	6	3	6	5						
6	4	62	7	3	1	1	0	0	1	1	1	5	6	5	7	7						
6	11	62	7	10	-	-	-	-	-	-	5	5	8	5	13	7						
6	25	62	7	20	0	0	0	0	0	0	4	3	8	3	12	4						
7	2	62	7	27	0	1	0	0	0	1	1	6	5	6	6	8						
8	13	62	10	12	0	0	0	0	0	0	4	5	19	5	23	7						
8	20	62	10	13	-	-	-	-	-	-	5	5	9	5	14	7						
8	27	62	9	27	-	-	-	-	-	-	0	7	7	5	7	9						
9	4	62	9	19	0	0	0	1	0	1	10	6	8	7	18	9						
9	10	62	10	4	-	-	-	-	-	-	13	6	13	7	26	9						
9	17	62	10	10	-	-	-	-	-	-	8	6	8	6	16	8						
9	24	62	10	16	-	-	-	-	-	-	4	5	6	5	10	7						

687-228 O-63—8

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	GEORGIA
MAJOR BASIN	SOUTHEAST
MINOR BASIN	CHATTAHOOCHEE RIVER
STATION LOCATION	CHATTAHOOCHEE RIVER AT COLUMBUS, GEORGIA

59

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEK	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	3300	0	440	440	0	150	20	1550	730	850	250	68	3	87	3	71	2	17	2	38	1										
10	16	61	5500	100	210	390	0	370	60	3480	910	950	150	68	4	69	4	71	2	88	2	51	1	17	1								
11	6	61	4400	190	20	480	0	210	0	3350	190	580	20	68	5	69	2	2	1														
11	20	61	1400	0	40	230	0	40	0	970	80	660	20																				
12	4	61	900	0	0	290	0	60	40	480	40	520	20	68	1	69	1																
12	18	61	100	0	0	20	0	0	0	40	60	80	40																				
1	2	62	100	0	0	0	0	40	0	60	40	20	20																				
1	15	62	100	0	0	0	0	20	0	20	40	0	0																				
2	5	62	200	0	20	50	0	0	70	0	90	20	0																				
2	19	62	600	0	0	50	0	180	0	290	110	90	70	69	1																		
3	5	62	200	0	0	20	0	0	0	110	90	90	180																				
3	19	62	1100	0	0	60	0	150	660	150	40	100	40	62	3																		
4	2	62	800	20	0	230	0	120	40	210	150	60	0	25	1	69	1																
4	16	62	300	0	0	20	0	50	20	160	50	110	250	69	1																		
5	7	62	6000	80	0	130	90	0	1160	4030	490	550	270	71	5	62	3	69	3														
5	21	62	5300	570	190	780	80	40	0	1880	1730	1140	460	88	3	71	3	92	3	68	2	69	2	2	2	38	1	17	1				
6	4	62	4500	150	150	970	0	390	20	950	1860	40	120	88	3	68	2	92	2	24	2	69	1	51	1	38	1	25	1				
6	18	62	2600	40	0	460	0	80	80	1140	760	380	550	68	2	92	2	69	2	38	1												
7	2	62	1700	130	80	110	0	80	0	460	840	460	170	92	3	68	1	71	1														
7	16	62	700	40	40	150	0	0	0	250	210	0	0	69	1																		
8	6	62	10100	290	830	5380	0	910	170	1530	1040	540	210	25	5	68	3	51	3	88	3	14	3	3	1	63	1						
8	20	62	3400	40	0	1550	0	540	250	410	620	540	120	25	3	88	2	51	2	68	2	63	1	32	1	29	1						
9	4	62	13400	9070	130	1860	0	40	0	1730	590	1270	250	4	6	68	4	25	3	88	2	40	2	38	2	69	1						
9	17	62	1200	90	0	740	0	50	0	140	230	320	200	25	2	26	1																

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
COLUMBUS, GEORGIA 059

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																					
														ROTIFERS											CRUSTACEA									
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)								
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
10	2	61	23	51	27	25	70	7	82	4	13	0	30	1420	47	6	16	6	2	6	22	6	11	6	2							1	1
10	16	61	23	30	57	27	82	13	27	11	19	0	10	113	11	4	17	2							0							0	1
11	6	61	27	74	23	13	57	5	82	3	5	0	0	146	17	4	11	3	22	3	16	3	21	2	8	50	2					0	0
11	20	61	23	21	57	18	56	18	82	13	30	0	0	84	11	4	16	1							1							0	0
12	4	61	23	29	82	20	57	18	27	9	24	0	10	86	22	3	21	3	11	3					1							2	1
12	18	61	62	18	88	7	71	6	92	6	63	0	0	2											0							0	0
1	2	62										0	0	1											0							0	2
1	15	62										0	0	0											1							0	0
2	5	62	57	22	62	6	56	6	58	5	61	0	10	1											0							0	0
2	19	62	57	25	82	15	70	8	27	5	47	70	0	2											0							0	0
3	5	62	62	24	57	17	27	7	92	7	45	0	0	5											0							0	0
3	19	62	57	36	27	8	2	5	92	5	46	0	0	0											0							0	0
4	2	62	57	39	92	11	95	7	9	7	36	0	10	6	11	1									0							0	1
4	16	62	57	44	9	9	62	5	92	3	39	0	0	3											0							0	0
5	7	62	82	65	57	26	9	2	67	1	6	40	0	18	11	2									0							0	0
5	21	62	57	31	56	14	82	11	28	9	35	510	0	40	11	2	17	2	22	1					13	51	2	50	1			0	0
6	4	62	57	25	56	19	71	12	92	7	37	190	20	72	11	3	46	2	17	2	22	1			21	76	2	51	2	53	1	0	0
6	18	62	92	45	57	18	56	16	28	6	15	80	10	44	22	3	46	1							14	73	2	50	2			0	2
7	2	62	92	77	56	7	57	5	82	2	9	0	20	218	17	5	22	4	11	3	18	3	16	2	46	73	3	50	2	76	2	0	0
7	16	62	57	27	27	24	56	10	70	7	32	0	60	20	11	1									9	50	1					0	0
8	6	62	27	86	45	2	23	2	57	1	9	0	10	521	22	7	17	4	18	2	16	1	46	1	6	53	1					0	0
8	20	62	27	55	70	20	23	10	57	3	12	0	0	2980	22	9	18	6	17	6	46	5	7	5	3	50	1					0	0
9	4	62	27	39	23	33	57	14	70	6	8	0	0	718	22	7	17	5	18	5	11	4	16	3	0							0	0
9	17	62	27	56	23	32	59	5	26	1	6	0	10	1970	22	8	17	7	18	6	11	5	21	4	0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
COLUMBUS, GEORGIA 59

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	6	61	11	17	3645	281	99	182	7	26	20	1	1	15	3	9	12	1	24
12	8	61	12	18	2612	431	176	255	5	60	41	5	2	32	2	7	32	2	29
3	5	62	3	14	3868	266	76	190	2	20	18	1	1	16	0	9	7	2	18
4	2	62	4	10	3685	153	56	97	2	16	16	4	1	10	1	5	5	1	11
5	7	62	5	17	4478	212	113	99	6	28	25	5	2	16	2	11	16	1	26
6	6	62	6	15	4160	222	119	103	5	31	31	5	2	23	1	13	18	2	19
7	9	62	7	19	4582	171	87	84	3	23	24	3	1	18	2	11	12	1	13
8	9	62	8	17	3650	277	158	119	6	41	36	3	2	29	2	19	24	2	30
9	4	62	9	13	4135	172	71	101	2	16	21	2	1	17	1	9	8	1	14

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
COLUMBUS, GEORGIA 59

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	25.0	8.2	7.1	1.7	22	1.9	3.2	-	4	20	15	-	15	-	-	-	40
10	9	61	23.0	8.2	7.1	.7	18	1.2	3.2	-	4	20	15	-	12	-	-	-	300
10	16	61	21.0	8.0	7.1	.9	29	1.3	3.8	-	4	21	15	-	18	-	-	-	11
10	23	61	20.0	8.8	7.1	1.7	25	1.6	3.8	-	4	21	16	-	15	-	-	-	80
10	30	61	19.0	7.7	7.1	.4	20	1.9	3.9	-	4	20	18	-	14	-	-	-	-
11	6	61	20.0	9.0	7.1	.4	25	1.6	3.5	-	4	21	18	5	14	5	.0	39	900
11	13	61	17.5	8.1	7.1	1.4	20	1.3	2.8	-	4	20	18	5	14	6	.1	24	20
11	20	61	16.5	7.2	7.0	.8	21	-	-	-	4	20	18	5	12	8	.0	60	*20
11	27	61	15.0	7.8	7.1	.7	16	1.2	2.9	-	4	21	18	5	15	5	.0	-	100
12	4	61	14.0	8.4	7.1	1.1	16	1.8	3.2	-	4	20	16	-	14	-	-	-	60
12	11	61	14.0	7.9	6.9	.5	26	1.6	3.1	-	4	20	16	5	20	9	.1	47	310
12	18	61	13.0	11.0	6.7	.8	29	1.9	4.9	-	4	12	14	-	160	5	.1	23	4800
12	26	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1600
1	2	62	8.0	11.4	6.9	.5	18	1.3	2.9	-	3	12	14	5	70	12	.0	44	1400
1	8	62	8.5	10.9	6.9	.9	23	1.6	3.4	-	3	12	15	-	150	5	-	27	2500
1	15	62	8.0	11.5	6.9	.7	25	1.3	3.2	-	3	15	15	-	40	7	-	51	*20
1	22	62	7.0	13.0	6.9	1.0	23	1.9	4.2	-	4	12	14	10	120	8	.5	-	-
1	29	62	9.0	11.0	6.9	.4	22	-	-	-	4	15	14	10	70	8	.5	-	1300
2	5	62	13.0	9.7	6.9	.6	22	1.4	4.6	-	4	15	16	-	40	-	-	-	1500
2	12	62	11.5	9.8	7.2	1.5	22	1.8	3.5	-	3	16	16	5	40	8	.0	-	450
2	19	62	12.5	9.2	7.2	.8	23	1.3	2.6	-	3	17	16	10	30	10	.0	-	150
2	26	62	14.5	10.4	6.9	.8	32	2.3	5.2	-	4	13	18	25	160	13	.1	-	13000
3	5	62	12.5	9.9	7.1	.7	22	1.8	3.8	-	2	14	34	-	110	-	-	-	1000
3	12	62	12.0	10.0	7.1	1.9	30	1.4	4.8	-	3	12	12	-	100	-	-	-	1200
3	19	62	12.0	10.1	7.0	.3	19	1.0	3.2	-	3	11	14	-	122	-	-	-	2500
3	26	62	15.0	9.4	7.1	.6	17	.9	2.6	-	2	13	17	-	38	-	-	-	2000
4	2	62	15.0	10.1	7.0	1.1	21	1.4	3.8	-	4	13	14	-	75	-	-	-	10000
4	9	62	15.0	10.1	7.0	.7	23	1.2	2.8	-	3	14	14	-	50	-	-	-	4500
4	16	62	16.0	9.3	7.0	.9	19	1.8	2.3	-	1	11	16	-	150	-	-	-	3800
4	23	62	16.0	9.6	7.1	.8	19	.8	3.6	-	2	13	19	-	42	-	-	-	790
4	30	62	19.0	8.7	7.2	.7	20	.9	2.9	-	2	13	16	-	33	-	-	-	940
5	7	62	21.0	7.9	7.2	.8	18	1.4	2.8	-	3	13	18	-	23	-	-	-	160
5	14	62	22.5	7.2	7.1	.6	20	1.2	2.6	-	3	16	14	-	20	-	-	-	20
5	21	62	25.0	7.4	7.2	.7	19	.9	1.9	-	3	17	14	-	9	-	-	-	*100
5	28	62	26.0	7.1	7.2	.7	21	.9	3.2	-	3	16	16	-	8	-	-	-	-
6	4	62	26.0	5.1	7.1	.7	23	1.9	3.8	-	3	19	14	10	8	10	.0	-	5500
6	11	62	27.0	6.3	7.4	1.3	28	.8	3.8	-	3	17	15	-	10	19	.0	-	170
6	18	62	28.0	4.2	6.9	1.8	19	1.4	4.0	-	2	16	16	-	18	-	-	-	1800
6	25	62	28.0	5.5	7.0	.9	26	1.0	3.6	-	4	13	14	-	15	-	-	-	60

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	GEORGIA
MAJOR BASIN	SOUTHEAST
MINOR BASIN	CHATTAHOOCHEE RIVER
STATION LOCATION	CHATTAHOOCHEE RIVER AT COLUMBUS, GEORGIA

59

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	2	62	27.0	5.0	6.9	.2	21	1.2	2.9	-	3	16	14	5	12	6	.0	34	100
7	9	62	28.0	5.5	7.0	.4	25	1.0	2.8	-	3	17	15	-	18	-	-	-	200
7	16	62	28.0	4.0	6.8	.6	20	.6	4.4	-	3	17	16	-	30	-	-	-	-
7	23	62	29.0	4.9	6.8	.5	20	.9	3.7	-	3	16	15	-	18	-	-	-	20
7	30	62	29.0	5.0	6.8	.6	19	1.2	3.4	-	3	15	15	-	8	-	-	-	20
8	6	62	29.5	5.7	7.1	1.3	19	.8	4.2	-	4	20	15	-	8	-	-	-	40
8	13	62	29.0	5.0	7.1	.8	25	.9	2.9	-	4	18	15	5	15	8	.0	-	*20
8	20	62	29.2	7.0	7.4	1.0	25	1.2	3.0	-	4	18	14	-	8	-	-	-	100
8	27	62	28.0	4.6	7.0	.2	22	1.0	3.6	-	4	18	15	5	8	6	.0	55	100
9	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
9	4	62	28.2	5.5	6.9	.7	23	1.8	3.6	-	4	19	14	-	8	-	-	-	-
9	10	62	28.0	4.7	6.9	.9	23	1.9	2.8	-	4	19	15	-	8	-	-	-	20
9	17	62	27.5	5.5	7.0	.9	27	.9	3.6	-	4	18	15	-	5	-	-	-	*20
9	24	62	26.0	5.9	6.9	.8	25	.9	2.8	-	4	18	16	-	14	-	-	-	40

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Columbus, Georgia
Operated by U.S. Geological Survey

STATE	Georgia
MAJOR BASIN	Southeast
MINOR BASIN	Chattahoochee River
STATION LOCATION	Chattahoochee River at Columbus, Georgia

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	1.380	3.980	3.930	10.400	11.800	11.000	34.600	10.800	3.500	4.020	5.140	2.170
2	1.350	5.080	1.380	9.800	9.500	13.100	24.600	9.630	4.130	4.410	5.450	2.350
3	3.620	5.650	1.290	8.860	9.590	13.800	13.700	8.900	3.650	5.510	5.670	1.800
4	1.350	2.100	2.740	9.560	10.100	12.700	13.100	9.490	5.370	2.990	2.900	5.540
5	2.750	1.350	4.920	9.990	8.390	12.000	12.900	7.980	5.600	4.680	2.900	3.930
6	2.780	3.760	4.350	14.100	9.350	10.100	13.300	8.810	5.490	5.960	3.370	2.940
7	1.420	5.090	4.840	14.100	8.860	10.200	15.700	9.280	5.040	7.410	5.570	2.170
8	1.370	5.730	4.160	13.900	9.390	11.900	17.200	6.790	5.270	7.920	3.780	1.500
9	1.360	5.510	1.430	11.900	9.120	10.600	13.200	7.500	3.070	7.790	3.500	1.520
10	1.880	2.500	5.200	10.800	6.440	10.200	12.800	6.410	1.560	8.440	4.490	3.630
11	2.190	1.500	9.730	10.700	2.130	22.900	11.600	6.520	4.710	4.270	1.990	3.800
12	4.520	1.400	22.500	10.500	5.890	37.100	34.000	1.750	7.790	5.830	1.510	4.700
13	2.240	3.500	51.600	9.780	6.230	34.300	47.400	1.520	7.420	5.780	2.570	3.150
14	1.450	4.200	52.800	9.870	7.090	16.500	36.100	2.700	8.140	4.400	3.690	3.620
15	1.350	3.940	49.600	10.800	5.670	14.900	18.400	5.190	6.900	2.440	4.080	1.500
16	3.000	3.890	34.200	10.000	4.180	13.300	12.900	5.820	5.340	2.560	5.130	1.340
17	4.190	4.800	18.800	9.690	2.900	13.100	14.700	5.170	2.820	3.590	5.060	4.770
18	3.410	2.080	23.900	9.730	1.830	13.000	11.400	5.890	4.540	3.820	2.260	2.480
19	3.900	1.310	27.800	11.900	6.620	12.100	12.800	3.300	6.870	3.950	2.260	4.000
20	3.740	5.010	26.900	19.600	7.060	12.400	12.800	3.230	6.210	3.110	2.600	4.190
21	1.420	4.650	20.900	19.800	6.260	11.600	11.700	5.170	7.720	1.830	2.980	2.960
22	1.360	3.720	15.000	13.800	20.800	11.200	12.700	4.400	6.350	1.810	4.170	1.560
23	2.820	1.430	12.600	11.600	29.900	11.900	12.600	4.860	4.260	2.160	4.920	1.320
24	4.220	4.280	12.000	9.390	38.400	11.900	10.700	3.020	2.940	2.750	2.830	3.570
25	4.140	2.360	11.000	12.100	32.400	11.100	9.490	4.840	5.020	3.390	2.050	5.390
26	4.090	1.300	11.900	12.100	20.800	15.500	10.900	2.530	4.310	3.130	1.390	2.600
27	3.720	4.430	10.600	9.660	15.800	13.600	10.600	2.190	3.490	2.830	4.660	6.030
28	1.370	4.510	10.800	11.200	11.700	11.500	11.900	3.180	2.970	1.890	4.310	3.900
29	1.350	4.100	8.060	12.100		11.900	11.300	4.400	4.020	1.480	4.270	3.350
30	2.390	4.600	9.680	12.000		10.400	10.200	3.520	3.440	3.640	1.630	1.500
31	4.810		9.950	12.000		17.300		4.430		4.600	3.610	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ALABAMA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
LANETT, ALABAMA 120

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
6	22	62	800	0	0	20	0	0	0	170	620	40	120	87	1																		
7	10	62	400	0	0	0	0	0	0	100	330	0	20																				
7	16	62	700	0	0	80	0	0	0	250	380	40	420																				
8	6	62	1200	100	0	20	0	170	0	210	700	170	120																				
8	20	62	700	0	0	230	0	60	0	290	170	80	170	68	1																		
9	3	62	800	0	0	40	0	150	0	210	460	40	0	92	1																		
9	17	62	600	0	40	40	0	20	0	130	340	40	210																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ALABAMA

MAJOR BASIN SOUTHEAST

MINOR BASIN CHATTAHOOCHEE RIVER

STATION LOCATION CHATTAHOOCHEE RIVER AT

LANETT, ALABAMA 120

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT				1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
6	22	62	92	8	65	7	71	5	66	4	76	0	0	1											0							2	0
7	10	62	92	25	56	13	74	11	62	10	41	0	0	0											0							0	0
7	16	62	92	10	57	7	2	6	56	4	73	0	0	1											0							0	0
8	6	62	57	16	92	8	95	6	71	5	65	0	0	12	15	2									0							0	0
8	20	62	92	15	57	12	62	7	70	7	59	0	0	3											0							0	0
9	3	62	92	32	57	21	28	8	62	6	33	0	0	0											0							0	0
9	17	62	92	24	53	8	62	7	57	6	55	0	0	1											0							3	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE ALABAMA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
LANETT, ALABAMA 120

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	10	62	8	6	0	0	0	0	0	0	2	5	4	5	6	7						
7	16	62	8	15	1	1	0	1	1	1	9	6	8	5	17	7						
7	23	62	10	11	0	1	0	1	0	1	7	5	9	5	16	7						
7	30	62	8	22	1	1	0	1	1	1	7	5	8	5	15	7						
8	6	62	8	27	1	1	0	0	1	0	4	5	9	4	13	7						
8	20	62	9	7	0	1	0	0	0	1	10	13	14	7	24	15						
8	27	62	9	11	1	1	0	0	1	1	7	5	6	6	13	7						
9	3	62	9	18	0	1	0	0	0	1	10	5	14	5	24	7						
9	10	62	9	27	1	1	0	0	1	1	8	6	6	7	14	9						
9	12	62	10	10	0	1	0	1	0	1	16	6	13	6	29	8						
9	24	62	10	16	0	0	0	1	0	1	2	6	8	6	10	8						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE ALABAMA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
LANETT, ALABAMA 120

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
6	7	62	6	16	5130	177	97	80	3	23	32	7	3	22	0	11	12	1	15
7	12	62	7	20	5118	155	74	81	1	19	24	3	2	18	1	10	6	1	13
8	9	62	8	17	5250	210	97	113	3	27	27	2	1	22	2	13	12	2	13
9	7	62	9	15	5080	224	101	123	3	24	34	5	2	26	1	12	10	2	16

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ALABAMA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
LANETT, ALABAMA 120

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	10	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23000
7	16	62	-	-	7.7	-	-	-	-	-	15	24	-	5	105	11	-	74	22000
7	23	62	30.5	-	7.8	-	-	-	-	-	7	18	28	5	*25	13	-	-	13000
7	30	62	26.7	-	7.3	-	-	-	-	-	-	15	20	-	75	-	-	-	5000
8	6	62	26.1	-	6.5	-	-	-	-	-	-	13	12	-	51	-	-	-	-
8	13	62	27.5	-	6.9	-	-	-	-	-	-	13	18	-	32	-	-	-	2600
8	17	62	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
8	20	62	28.0	-	6.8	-	-	-	-	-	-	14	16	-	42	-	-	-	3000
8	24	62	25.5	-	7.0	-	-	-	-	-	-	12	16	-	31	-	-	-	-
8	27	62	-	-	7.3	-	-	-	-	-	6	22	44	5	91	-	-	-	10000
9	3	62	25.5	-	6.5	-	-	-	-	-	-	13	16	-	26	-	-	-	3800
9	10	62	24.0	-	6.5	-	-	-	-	-	-	11	12	-	31	-	-	-	4000
9	17	62	24.6	-	6.8	-	-	-	-	-	-	12	16	-	48	-	-	-	6600
9	24	62	22.0	-	7.6	-	-	-	-	-	7	22	28	5	*25	9	-	67	4400

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at West Point, Georgia
Operated by U.S. Geological Survey

STATE	Alabama
MAJOR BASIN	Southeast
MINOR BASIN	Chattahoochee River
STATION LOCATION	Chattahoochee River at Lanett, Alabama

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	2.730	2.680	2.420	5.820	8.080	10.200	18.100	5.790	3.770	3.590	4.400	3.000
2	2.200	3.830	2.530	4.800	7.360	9.810	15.500	7.120	4.030	2.910	4.130	2.890
3	1.620	3.820	2.510	7.510	6.820	9.530	9.470	7.380	3.910	2.380	3.920	1.980
4	2.110	3.870	2.340	9.130	6.640	9.260	9.670	7.220	3.750	2.590	3.900	1.520
5	2.330	4.080	2.060	9.140	4.890	6.920	9.620	7.040	3.640	3.730	3.790	2.480
6	2.030	3.520	2.330	11.400	4.210	5.340	10.700	6.450	3.560	4.040	2.570	2.990
7	1.770	1.940	2.960	13.300	4.210	8.190	12.900	4.370	3.750	10.600	2.100	2.960
8	1.770	1.690	2.980	8.140	4.380	8.960	13.500	3.740	3.580	10.500	2.950	3.010
9	1.600	3.590	2.820	6.110	4.380	9.150	8.290	4.240	3.530	5.670	3.320	3.260
10	1.520	3.610	7.570	7.520	4.380	9.780	7.160	4.930	3.500	4.670	3.050	2.330
11	2.170	3.670	18.600	8.260	4.300	13.300	9.110	4.950	3.450	3.640	2.820	1.820
12	2.950	3.570	27.000	8.080	3.870	24.700	21.000	4.820	3.550	3.390	2.680	2.760
13	2.860	2.490	45.400	7.900	3.530	21.400	31.000	4.630	4.840	3.370	2.190	3.020
14	2.840	2.100	40.700	7.720	3.780	13.100	24.100	3.480	6.850	3.920	1.930	3.130
15	2.810	2.680	34.000	5.230	3.870	11.200	11.900	3.110	6.150	3.350	3.030	3.410
16	2.190	3.920	19.300	5.060	4.210	11.200	11.900	3.490	5.770	2.560	2.880	3.960
17	1.780	4.060	11.900	7.180	4.380	11.200	9.190	4.360	5.440	2.180	2.710	2.540
18	2.180	3.880	17.500	8.080	4.300	10.900	10.300	4.640	3.410	2.230	2.540	2.080
19	3.240	3.680	30.100	13.400	3.960	9.970	10.900	4.560	3.130	2.170	2.550	3.000
20	3.240	2.680	25.100	19.000	3.960	8.000	10.500	4.280	4.170	2.350	2.170	3.090
21	3.240	2.210	17.700	13.800	5.060	9.650	10.200	3.180	6.250	2.160	1.900	2.900
22	3.240	2.440	13.100	8.080	11.300	11.800	10.100	2.830	6.220	2.120	2.990	2.870
23	2.440	2.960	10.100	6.640	27.500	10.700	9.610	2.990	5.780	1.960	3.660	2.900
24	1.840	4.750	9.290	8.800	30.000	10.100	7.810	3.650	5.480	1.660	3.580	2.100
25	2.610	4.820	9.350	8.990	25.100	10.200	8.390	3.780	3.500	1.980	3.460	1.640
26	3.740	3.690	7.050	8.440	18.400	8.710	10.300	3.900	2.760	2.500	3.240	2.620
27	3.780	3.120	8.650	8.260	11.400	8.840	8.720	3.720	2.660	2.740	2.200	4.480
28	3.690	2.680	9.630	9.370	10.600	9.510	7.090	2.890	4.230	2.760	1.770	4.730
29	3.650	2.470	9.960	11.100		9.030	7.760	2.670	5.060	2.680	2.720	3.750
30	2.540	2.250	9.450	9.180		8.590	6.660	2.800	4.220	2.960	3.110	3.140
31	1.880		9.170	8.260		11.700		3.500		2.920	3.010	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
ATLANTA, GEORGIA 58

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	4	61	10	17	0	1	0	1	0	1	0	3	2	4	2	5						
10	11	61	10	24	-	-	-	-	-	-	6	5	4	5	10	7						
10	18	61	10	31	-	-	-	-	-	-	3	4	3	4	5	6						
10	25	61	11	3	-	-	-	-	-	-	9	5	3	4	12	6						
11	1	61	11	10	-	-	-	-	-	-	243	9	6	5	249	10						
11	8	61	11	22	0	0	0	0	0	0	2	4	7	4	9	6						
11	15	61	11	28	-	-	-	-	-	-	9	4	7	3	16	5						
11	22	61	11	30	-	-	-	-	-	-	0	5	2	5	2	7						
11	29	61	12	4	-	-	-	-	-	-	6	6	3	5	9	8						
12	6	61	12	14	0	0	0	1	0	1	20	4	14	4	34	6						
12	13	61	12	21	-	-	-	-	-	-	30	8	17	6	47	10						
12	27	61	1	5	-	-	-	-	-	-	7	6	0	5	7	8						
1	3	62	1	11	0	1	0	1	0	1	7	4	4	4	11	6						
1	17	62	1	25	-	-	-	-	-	-	9	6	9	5	18	7						
1	24	62	2	1	-	-	-	-	-	-	9	5	4	5	13	7						
1	31	62	2	14	-	-	-	-	-	-	16	5	11	5	27	7						
2	7	62	2	19	1	1	0	1	1	1	14	4	10	4	24	6						
2	14	62	2	27	-	-	-	-	-	-	6	5	14	5	20	7						
3	7	62	3	16	0	1	0	1	0	1	10	4	9	4	19	6						
3	14	62	3	26	-	-	-	-	-	-	31	6	13	5	44	8						
3	21	62	4	3	-	-	-	-	-	-	14	6	12	6	26	8						
3	28	62	4	6	-	-	-	-	-	-	22	5	4	4	26	6						
4	4	62	4	17	0	1	0	0	0	1	22	5	13	4	35	6						
4	11	62	4	25	-	-	-	-	-	-	8	6	7	5	15	7						
4	18	62	5	1	-	-	-	-	-	-	15	6	5	5	20	7						
4	25	62	5	28	-	-	-	-	-	-	1	7	7	6	8	9						
5	2	62	6	4	-	-	-	-	-	-	8	7	8	6	16	9						
5	9	62	6	11	0	0	0	0	0	0	4	5	8	5	12	7						
5	16	62	6	26	-	-	-	-	-	-	0	10	5	6	5	12						
5	23	62	6	27	-	-	-	-	-	-	3	6	2	5	5	8						
5	30	62	7	2	-	-	-	-	-	-	2	5	9	5	11	7						
6	6	62	7	5	0	1	0	1	0	1	6	5	4	5	10	7						
6	11	62	7	10	-	-	-	-	-	-	10	5	7	4	17	6						
6	20	62	7	18	-	-	-	-	-	-	10	5	9	6	19	7						
6	27	62	7	30	-	-	-	-	-	-	1	6	2	6	3	8						
7	11	62	8	6	0	0	0	0	0	0	8	6	9	6	17	8						
7	16	62	8	8	-	-	-	-	-	-	3	5	8	5	11	7						
7	25	62	8	21	-	-	-	-	-	-	10	5	12	5	22	7						
8	1	62	8	21	-	-	-	-	-	-	3	5	5	5	8	7						
8	8	62	8	27	1	1	0	1	1	1	14	3	2	2	16	4						
8	15	62	8	29	-	-	-	-	-	-	11	7	0	6	11	9						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE GEORGIA

MAJOR BASIN SOUTHEAST

MINOR BASIN CHATTAHOOCHEE RIVER

STATION LOCATION CHATTAHOOCHEE RIVER AT
ATLANTA, GEORGIA 58

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMI-NATION		ALPHA						BETA								DATE OF DETERMI-NATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL						ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±			MO.	DAY	µµc/g	±	µµc/g	±
8	22	62	9	5	-	-	-	-	-	-	9	6	9	5	18	7								
8	29	62	9	14	-	-	-	-	-	-	3	6	6	8	9	10								
9	5	62	9	20	0	0	0	0	0	0	6	5	7	5	13	7								
9	20	62	10	10	-	-	-	-	-	-	5	5	7	5	12	7								
9	26	62	10	24	-	-	-	-	-	-	5	6	7	5	12	8								

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
ATLANTA, GEORGIA 58

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	00	0	0	0	0	0	0	20	0	0	20																				
10	18	61	100	0	0	0	0	0	20	20	20	0	0																				
11	1	61	00	0	0	0	0	0	0	0	20	20	20																				
11	22	61	100	0	0	20	0	0	0	40	0	0	0																				
12	5	61	100	0	0	0	0	0	0	20	40	0	40																				
12	27	61	300	0	0	50	0	50	0	160	50	90	90																				
1	3	62	300	0	0	0	0	110	0	110	50	0	20																				
1	17	62	100	0	0	20	0	0	0	50	20	50	110																				
2	7	62	200	0	0	0	0	20	0	90	90	0	20																				
3	7	62	600	0	0	20	0	0	0	390	210	20	0	69	1																		
3	21	62	500	0	0	0	0	20	0	270	250	160	130	77	1	69	1																
4	4	62	900	0	0	80	0	20	20	310	440	60	80	69	1	92	1	77	1														
4	18	62	700	0	20	60	0	20	0	230	340	40	150	69	1	77	1																
5	9	62	700	0	0	150	0	190	40	120	230	40	40																				
5	23	62	400	20	0	80	0	0	60	130	150	130	130																				
6	6	62	500	250	0	0	0	0	0	80	210	0	80	2	1																		
6	20	62	300	0	0	20	0	0	0	60	230	0	0																				
7	11	62	200	0	0	20	0	0	0	110	40	0	80																				
7	18	62	400	0	0	40	0	40	0	80	250	40	0																				
8	1	62	400	0	0	0	0	0	0	40	370	0	0																				
8	22	62	700	0	0	0	0	0	40	80	540	0	40	87	1	97	1																
9	5	62	200	0	0	0	0	0	0	130	40	40	40																				
9	20	62	100	0	10	40	0	20	0	10	20	20	40																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
ATLANTA, GEORGIA 058

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH					NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	4	61	65	15	57	10	2	7	56	5	63	0	0	0											0							0	0
10	18	61										370	0	2											0							0	0
11	1	61	57	15	95	11	56	8	65	6	60	0	0	11											0							1	1
11	22	61										60	0	0											0							0	0
12	5	61	57	10	62	10	56	9	28	9	62	0	0	0											0							0	0
12	27	61										0	0	3											3							1	0
1	3	62										140	0	4											1							1	0
1	17	62	57	35	95	12	28	11	2	7	35	50	0	1											1							1	0
2	7	62										20	0	0											0							0	0
3	7	62	57	26	95	24	9	13	92	7	30	0	0	0											0							0	0
3	21	62	57	35	95	16	9	6	27	6	37	0	0	2											1							0	0
4	4	62	9	34	57	30	92	11	95	10	15	0	0	2											0							0	0
4	18	62	57	35	9	34	95	7	92	3	21	0	0	0											0							0	0
5	9	62	57	31	92	26	9	12	95	8	23	40	0	2											0							0	0
5	23	62	92	20	57	18	2	6	95	5	51	0	0	10	20	1									0							0	1
6	6	62	57	26	2	10	92	8	95	3	53	0	0	0											0							0	0
6	20	62	96	11	65	8	43	8	57	7	66	20	0	3											0							1	0
7	11	62	57	25	28	8	65	7	64	5	55	0	0	3											0							–	–
7	18	62	57	26	2	10	95	4	65	4	56	20	0	1											0							0	1
8	1	62	57	17	65	11	2	9	95	8	55	0	0	0											0							0	0
8	22	62	65	12	57	9	71	6	43	6	67	0	0	0											0							0	0
9	5	62	57	16	2	8	28	8	95	8	60	0	0	2											2							0	0
9	20	62	26	15	27	11	57	8	28	7	59	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
ATLANTA, GEORGIA 58

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	2	61	10	20	5090	179	62	117	2	17	16	1	1	13	1	7	5	2	13
11	14	61	12	5	6080	174	41	133	1	11	12	1	0	10	1	5	2	1	9
1	18	62	2	16	5020	259	80	179	-	-	-	-	-	-	-	-	-	-	-
3	14	62	4	19	5120#	183	84	99	-	-	-	-	-	-	-	-	-	-	-
3	14	62		*	10140	221	82	139	4	21	23	1	2	19	1	10	7	1	16
5	8	62	6	7	5040	112	52	60	2	15	12	1	1	9	1	5	5	1	12
6	25	62	8	6	5150	161	65	96	-	-	-	-	-	-	-	-	-	-	-
8	29	62	9	13	5070	110	42	68	-	-	-	-	-	-	-	-	-	-	-
8	29	62		*	10220	135	53	82	2	12	16	1	1	12	2	6	3	1	13
9	26	62	10	10	5210	134	74	60	-	-	-	-	-	-	-	-	-	-	-

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
ATLANTA, GEORGIA 58

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2900
10	11	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	970
10	18	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	880
10	20	61	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
10	25	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350
11	1	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	370
11	8	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	620
11	15	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	2300
11	22	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170
11	29	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	*11
12	5	61	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-
12	6	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	530
12	13	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.2	-	26000
12	15	61	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-
12	22	61	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
12	27	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	820
1	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	1300
1	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	*22
1	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	4200
1	31	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	2000
2	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	*22
2	14	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	360
2	16	62	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
3	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	330
3	14	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000
3	21	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200
3	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	670
4	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1300
4	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	530
4	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	270
4	19	62	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-
4	25	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	620
5	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	9200
5	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	5000
5	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	1000
5	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	1200
5	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
6	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
6	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	670

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN CHATTAHOOCHEE RIVER
STATION LOCATION CHATTAHOOCHEE RIVER AT
ATLANTA, GEORGIA 58

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
6	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	1200
6	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4800
7	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	850
7	16	62	-	-	-	-	-	-	-	-	-	-	-	5	*25	-	.0	-	-
7	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700
7	25	62	-	-	-	-	-	-	-	-	4	16	24	-	-	6	.0	-	3400
8	1	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	2200
8	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14000
8	15	62	-	-	-	-	8	-	-	-	7	20	-	0	25	8	-	40	8600
8	22	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13000
8	29	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3000
9	5	62	-	-	7.6	-	-	-	-	-	8	14	24	0	*25	3	.0	-	2000
9	13	62	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-
9	20	62	-	-	-	-	-	-	-	-	4	8	8	5	25	-	.0	-	-
9	26	62	-	-	7.7	-	-	-	-	-	4	14	32	0	*25	2	-	47	*22

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Atlanta, Georgia
Operated by U.S. Geological Survey

STATE	Georgia
MAJOR BASIN	Southeast
MINOR BASIN	Chattahoochee River
STATION LOCATION	Chattahoochee River at Atlanta, Georgia

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.830	3.620	1.360	1.750	3.470	6.280	3.840	4.360	2.160	1.080	3.040	1.630
2	.888	3.570	1.200	5.930	3.800	5.760	3.400	4.440	1.600	1.250	3.000	1.060
3	1.620	3.720	.820	6.640	2.260	5.590	5.420	4.460	1.150	1.830	3.100	2.160
4	1.310	3.370	.954	6.640	1.050	1.700	5.590	4.350	1.250	2.270	1.930	2.720
5	1.050	.982	1.500	6.640	1.080	3.120	7.000	2.910	1.730	2.450	1.240	2.730
6	1.060	.713	1.520	6.020	1.520	5.760	7.000	1.230	1.970	4.700	1.880	2.770
7	.874	3.020	1.510	1.570	1.540	6.280	6.820	1.640	1.840	1.980	2.200	2.720
8	.808	3.180	1.430	2.180	1.550	6.280	1.740	2.710	1.960	1.300	2.150	1.780
9	1.560	3.170	1.080	4.400	1.580	6.460	3.360	2.960	1.540	1.620	2.130	1.160
10	2.600	3.230	2.330	5.250	1.180	5.420	5.930	2.820	1.210	2.120	2.010	2.320
11	2.520	1.780	2.560	5.180	.898	2.870	7.180	2.840	1.320	1.880	1.470	2.460
12	2.500	1.260	14.100	5.160	1.170	4.400	11.400	1.880	4.410	2.510	1.060	2.580
13	2.510	1.690	13.500	4.190	1.400	4.910	5.250	1.210	5.000	2.170	1.200	2.500
14	1.740	2.940	5.930	1.370	1.460	5.250	4.400	1.550	4.710	1.220	1.800	2.470
15	1.260	3.000	2.400	2.380	1.440	6.640	6.460	2.770	4.400	.810	1.860	1.600
16	1.580	3.080	1.850	5.380	1.520	7.000	3.940	2.880	3.220	.990	1.720	1.190
17	3.060	3.000	1.930	5.750	1.150	7.000	6.460	3.060	1.340	1.110	1.860	2.260
18	2.960	1.880	12.400	5.490	1.040	5.760	7.000	2.900	1.410	1.280	1.430	2.700
19	3.020	1.280	6.820	5.500	1.380	3.760	7.000	1.830	4.550	1.210	1.180	2.420
20	3.000	1.610	7.000	4.200	2.410	5.590	6.640	1.290	4.680	1.180	1.600	2.420
21	2.060	1.790	5.840	1.400	2.420	6.280	7.000	1.340	4.560	1.040	2.800	2.550
22	1.270	1.820	5.250	2.400	10.300	6.460	6.280	2.140	4.470	.815	2.850	1.620
23	1.840	2.730	5.230	3.700	9.130	6.280	3.600	2.430	3.340	.995	2.720	1.100
24	3.600	2.270	5.480	4.000	7.000	4.920	5.930	2.560	1.330	1.100	2.730	2.020
25	3.700	1.750	3.560	3.940	7.000	1.420	6.820	2.480	1.270	1.230	1.660	3.140
26	3.600	1.300	5.910	3.960	3.720	3.300	3.330	1.500	1.870	1.650	1.190	3.090
27	3.530	1.190	6.440	2.720	5.620	4.910	3.040	1.300	2.200	1.130	2.090	3.180
28	2.430	1.010	6.720	2.810	5.930	4.740	1.980	1.320	2.390	1.030	2.870	2.300
29	1.260	1.170	6.510	3.080		4.910	1.370	1.960	2.220	1.020	2.750	1.870
30	1.610	1.420	5.560	3.820		4.740	2.670	1.830	1.650	2.450	2.730	1.320
31	3.900		1.330	3.960		5.250		1.750		3.400	2.660	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ALASKA
MAJOR BASIN ALASKA
MINOR BASIN YUKON RIVER
STATION LOCATION CHENA SLOUGH AT
FAIRBANKS, ALASKA 111

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE		CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
6	5	62	300	0	0	0	0	0	0	80	250		130	340																				
6	21	62	500	0	20	0	0	20	0	100	330		0	20	92	1																		
7	2	62	600	80	20	0	0	0	0	40	500		20	80	92	1																		
7	16	62	700	0	0	0	0	0	0	40	680		40	420	92	2																		
7	30	62	300	0	0	0	0	20	0	0	290		0	0																				
8	20	62	800	0	0	0	0	40	0	40	700		0	250	92	2																		
9	4	62	700	0	0	0	0	40	0	40	580		0	0																				
9	17	62	00	0	0	0	0	10	0	0	0		20	60																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ALASKA
MAJOR BASIN ALASKA
MINOR BASIN YUKON RIVER
STATION LOCATION CHENA SLOUGH AT
FAIRBANKS, ALASKA 111

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
6	5	62	92	33	46	8	2	6	14	5	48	0	0	0											0							0	0
6	21	62	92	43	14	9	45	7	2	4	37	0	0	0											0							0	0
7	2	62	92	62	14	21	45	8	26	1	8	0	0	1											0							0	0
7	16	62	92	60	14	24	45	5	36	4	7	0	0	0											0							0	0
7	30	62	14	31	92	18	2	8	46	6	37	0	0	1											0							0	0
8	20	62	92	76	14	16	36	2	52	2	4	0	0	2											0							0	0
9	4	62	92	16	14	15	2	9	35	7	53	0	0	0											0							0	0
9	17	62	92	35	49	16	35	10	14	4	35	10	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE ALASKA
MAJOR BASIN ALASKA
MINOR BASIN YUKON RIVER
STATION LOCATION CHENA SLOUGH AT
FAIRBANKS, ALASKA 111

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
11	17	61	12	21	0	1	1	1	1	1	1	4	2	4	3	6						
11	17	61	12	26	0	0	0	1	0	1	0	4	3	4	3	6						
1	19	62	2	9	1	1	0	0	1	1	176	117	176	7	352	10						
1	26	62	2	12	0	1	0	1	0	1	563	13	96	6	659	14						
3	14	62	4	4	1	1	1	1	2	1	3	4	3	5	6	6						
6	5	62	7	5	1	1	0	1	1	1	7	7	10	6	17	9						
6	21	62	7	18	0	1	0	1	0	1	6	5	4	6	10	7						
6	28	62	7	31	0	1	1	1	1	1	5	5	6	7	11	9						
7	9	62	8	6	1	1	0	1	1	1	3	6	8	6	11	8						
7	16	62	8	15	0	0	1	1	1	1	0	12	6	7	6	14						
7	23	62	8	15	3	3	0	2	3	4	27	11	7	6	34	13						
7	30	62	8	21	1	1	0	1	1	1	9	6	7	6	16	8						
8	6	62	10	8	0	0	0	1	0	1	4	7	12	8	16	11						
8	13	62	10	8	0	0	0	0	0	0	2	5	8	6	10	7						
8	20	62	10	13	0	0	1	1	1	1	4	5	8	6	12	7						
8	27	62	9	11	0	0	0	1	0	1	7	5	13	6	20	7						
9	4	62	9	18	1	1	0	1	1	1	19	6	22	6	41	8						
9	10	62	10	6	0	0	0	0	0	0	2	5	7	6	9	7						
9	17	62	10	8	0	0	0	1	0	1	27	5	62	6	89	7						
9	24	62	10	18	0	1	0	1	0	1	5	6	9	6	14	8						

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ALASKA
MAJOR BASIN ALASKA
MINOR BASIN YUKON RIVER
STATION LOCATION CHENA SLOUGH AT
FAIRBANKS, ALASKA 111

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
11	17	61	-	-	-	-	-	-	-	-	5	64	-	5	-	21	.1	125	-
6	28	62	-	-	-	-	-	-	-	-	4	56	88	10	*25	27	.0	97	-
8	20	62	-	-	-	-	-	-	-	-	2	72	72	10	-	19	-	-	-
8	27	62	-	-	-	-	-	-	-	-	2	60	76	15	-	18	.0	63	-
9	4	62	5.4	-	7.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	10	62	5.0	-	7.0	-	-	-	-	-	3	56	64	20	25	16	.0	100	-
9	17	62	3.5	-	7.1	-	-	-	-	-	3	56	68	15	*25	18	.0	106	-
9	24	62	4.4	-	7.0	-	-	-	-	-	2	60	80	20	*25	22	.0	100	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Fairbanks, Alaska
Operated by U.S. Geological Survey

STATE	Alaska
MAJOR BASIN	Alaska
MINOR BASIN	Yukon River
STATION LOCATION	Chena Slough at Fairbanks, Alaska

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	6.510	.900	.600	.500	.440	.380	.400	.580	12.100	2.900	4.480	12.000
2	5.650	.900	.600	.500	.440	.380	.400	.600	9.500	2.680	4.160	12.500
3	4.920	.900	.600	.500	.440	.380	.400	.640	8.210	2.510	3.960	11.700
4	4.480	.900	.600	.500	.440	.380	.400	.670	7.030	2.360	3.820	11.400
5	4.170	.900	.600	.500	.440	.380	.400	.710	6.890	2.270	3.740	11.100
6	3.840	.900	.600	.500	.440	.360	.400	.760	7.180	2.180	3.600	9.540
7	[illegible].590	.900	.600	.500	.440	.380	.400	.820	6.580	2.140	3.460	8.270
8	3.350	.900	.600	.500	.440	.380	.400	.920	5.880	2.080	3.340	7.270
9	3.000	.900	.600	.500	.440	.380	.400	1.100	5.980	2.040	3.280	6.520
10	2.500	.900	.600	.500	.440	.380	.400	1.600	5.350	2.020	3.230	5.980
11	2.100	.900	.600	.500	.440	.380	.400	2.330	5.220	1.960	3.120	5.520
12	1.600	.900	.600	.500	.440	.380	.400	2.970	5.090	1.900	2.970	5.130
13	1.500	.900	.600	.500	.440	.380	.400	3.940	4.880	1.950	2.820	4.820
14	1.400	.900	.600	.500	.440	.380	.400	5.020	4.690	3.210	2.700	4.570
15	1.400	.900	.600	.500	.440	.380	.400	7.340	4.500	3.890	2.590	4.340
16	1.400	.900	.600	.500	.440	.380	.400	9.040	4.700	3.230	2.490	4.160
17	1.500	.900	.600	.500	.440	.380	.400	10.300	4.390	2.830	2.430	4.040
18	1.600	.900	.600	.500	.440	.380	.400	11.600	3.960	2.540	2.470	3.940
19	1.600	.900	.600	.500	.440	.380	.400	11.400	3.650	2.390	2.500	3.800
20	1.700	.900	.600	.500	.440	.380	.400	11.000	3.320	2.260	2.470	3.630
21	1.800	.900	.600	.500	.440	.380	.400	11.900	3.110	2.160	2.470	3.520
22	1.700	.900	.600	.500	.440	.380	.400	12.700	3.220	2.360	2.470	3.420
23	1.700	.900	.600	.500	.440	.380	.400	13.100	5.350	3.880	2.490	3.310
24	1.700	.900	.600	.500	.440	.380	.400	13.200	5.590	3.870	2.490	3.190
25	1.600	.900	.600	.500	.440	.380	.400	13.400	4.340	4.380	2.660	3.100
26	1.600	.900	.600	.500	.440	.380	.400	13.400	3.690	7.500	2.830	3.080
27	1.500	.900	.600	.500	.440	.380	.400	13.800	3.320	8.960	2.990	3.140
28	1.400	.900	.600	.500	.440	.380	.400	13.900	3.140	7.460	4.520	3.130
29	1.400	.900	.600	.500	.440	.380	.400	13.700	3.110	6.240	7.220	3.020
30	1.300	.900	.600	.500	.440	.380	.400	13.600	3.060	5.470	8.570	2.920
31	1.300		.600	.500		.380		13.300		4.920	10.800	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE + LOWER SNAKE RIVER
STATION LOCATION CLEARWATER RIVER AT
LEWISTON, IDAHO 97

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES											
BEGINNING			END								NEUTRALS									
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	27	61	12	26	2330	236	81	155	2	16	29	7	3	18	1	13	7	1	13
12	26	61	1	30	3300	236	65	171	1	13	19	3	3	11	2	12	6	1	13
1	31	62	2	20	3720	154	37	117	1	8	13	3	1	8	1	8	2	0	5
2	21	62	3	20	3960	169	41	128	1	9	14	3	2	8	1	8	3	0	6
3	21	62	4	17	5700	135	49	86	2	11	11	2	1	8	0	6	5	1	13
4	18	62	5	22	3090	166	73	93	3	19	14	1	1	11	1	9	8	1	19
5	23	62	6	18	6750	96	55	41	6	15	9	1	1	7	0	6	6	1	12
6	19	62	7	9	8700	97	57	40	1	14	12	2	1	9	0	7	7	1	15
8	7	62	8	20	3320	182	74	108	1	15	25	5	2	18	0	14	5	2	12
8	21	62	9	11	3970	131	59	72	0	15	18	2	1	13	2	11	5	1	9

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE & LOWER SNAKE RIVER
STATION LOCATION CLEARWATER RIVER AT
LEWISTON, IDAHO 97

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	10	61	10	26	0	1	0	0	0	1	7	4	9	4	16	6						
10	17	61	11	1	0	1	0	1	0	1	6	4	15	5	21	6						
10	24	61	11	3	0	1	0	1	0	1	7	4	16	4	23	6						
10	31	61	11	13	0	0	0	1	0	1	19	4	51	6	70	7						
11	7	61	11	24	1	1	1	2	2	2	43	8	35	4	78	9						
11	14	61	11	28	0	0	0	1	0	1	6	4	22	4	28	6						
11	21	61	12	5	0	0	0	1	0	1	5	4	23	5	28	6						
11	28	61	12	8	0	1	0	1	0	1	11	4	31	5	42	6						
12	5	61	12	18	0	1	0	0	0	1	27	5	55	5	82	7						
12	12	61	12	27	0	1	1	1	1	1	46	5	24	5	70	7						
12	19	61	1	3	0	0	0	0	0	0	13	4	21	4	34	6						
12	26	61	1	11	0	1	0	1	0	1	37	5	45	5	82	7						
1	2	62	1	15	0	1	0	1	0	1	28	6	39	6	67	8						
1	9	62	1	22	0	1	0	1	0	1	101	7	86	6	187	9						
1	16	62	2	2	0	1	0	1	0	1	12	4	25	4	37	6						
1	23	62	2	6	0	1	0	1	0	1	4	4	18	5	22	6						
1	30	62	2	13	0	1	0	1	0	1	21	4	37	5	58	6						
2	6	62	2	20	0	1	0	0	0	1	8	4	18	4	26	6						
2	13	62	2	27	1	1	0	1	1	1	24	4	22	4	46	5						
2	20	62	3	7	0	1	0	0	0	1	9	4	15	4	24	6						
2	27	62	3	19	0	1	0	1	0	1	12	4	10	4	22	6						
3	6	62	3	23	0	0	0	0	0	0	6	4	13	4	19	6						
3	13	62	3	30	0	1	0	1	0	1	5	4	13	4	18	6						
3	20	62	4	4	1	1	0	1	1	1	17	5	9	4	26	6						
3	27	62	4	12	4	3	0	1	4	3	46	8	12	5	58	9						
4	3	62	4	18	1	1	0	1	1	1	12	4	8	4	20	5						
4	10	62	4	26	1	1	0	0	1	1	26	5	13	4	39	6						
4	17	62	5	22	0	0	0	0	0	0	15	7	17	6	32	9						
4	24	62	5	29	0	1	0	1	0	1	15	7	12	6	27	9						
5	1	62	6	4	0	1	0	0	0	1	8	5	9	5	17	7						
5	8	62	6	20	0	0	0	1	0	1	5	6	10	6	15	8						
5	22	62	7	6	0	1	0	1	0	1	4	4	10	4	14	6						
5	29	62	6	29	0	1	0	1	0	1	13	5	17	5	30	7						
6	5	62	7	6	0	1	0	1	0	1	3	6	8	6	11	8						
6	12	62	7	12	-	-	-	-	-	-	0	5	10	6	10	8						
6	19	62	7	18	0	1	0	0	0	1	10	5	9	6	19	7						
6	26	62	8	6	0	0	0	0	0	0	5	6	5	6	10	8						
7	31	62	8	23	0	0	0	0	0	0	0	6	0	5	0	7						
8	8	62	8	28	0	1	0	1	0	1	7	10	7	9	14	13						
8	14	62	8	31	0	1	0	1	0	1	0	7	4	5	4	9						
8	21	62	9	6	0	1	0	1	0	1	3	5	6	5	9	7						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE & LOWER SNAKE RIVER
STATION LOCATION CLEARWATER RIVER AT
LEWISTON, IDAHO 97

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	28	62	9	19	0	0	0	0	0	0	8	6	2	7	10	9						
9	4	62	9	24	0	0	0	0	0	0	8	6	7	6	15	8						
9	11	62	10	13	0	0	0	0	0	0	5	5	7	5	12	7						
9	18	62	10	15	0	1	0	1	0	1	2	5	16	6	18	7						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE & LOWER SNAKE RIVER
STATION LOCATION CLEARWATER RIVER AT
LEWISTON, IDAHO 97

DATE OF SAMPLE			ALGAE *(Number per milliliter)*									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED *(Pigmented)*		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	10	61	00	0	0	0	0	0	0	0	50	0	310																				
10	17	61	100	0	0	0	0	0	0	0	120	0	120																				
11	7	61	100	0	0	0	0	0	0	0	60	20	100																				
11	21	61	100	0	0	0	0	0	0	40	80	0	20																				
12	5	61	500	0	0	0	0	0	0	0	520	0	90																				
12	19	61	600	20	0	20	0	50	0	200	290	0	140	69	1																		
1	2	62	200	0	0	0	0	0	0	0	180	0	270																				
1	16	62	200	20	0	0	0	20	0	20	110	0	90																				
2	6	62	500	0	70	0	0	0	0	110	290	0	50	92	1																		
2	20	62	200	0	0	0	0	0	0	0	220	0	490																				
3	6	62	500	0	0	0	0	20	0	80	390	0	150	97	1																		
3	20	62	1400	0	0	0	40	40	0	60	1280	0	270	92	2	97	2																
4	3	62	1000	0	20	0	0	60	0	80	790	0	270	84	1	92	1																
4	17	62	800	0	0	0	20	0	0	0	830	0	250	92	1																		
5	8	62	700	0	20	0	0	20	0	0	620	0	80	14	1																		
5	22	62	500	0	0	20	20	0	0	130	380	40	300																				
6	5	62	100	0	0	0	0	0	0	20	130	170	720																				
6	19	62	300	0	0	0	0	0	0	20	320	40	590																				
7	3	62	1000	0	0	0	0	0	0	210	800	40	1350	97	1	73	1																
7	17	62	300	0	0	50	0	0	0	50	230	50	250																				
8	8	62	300	0	0	0	0	0	0	80	250	0	40																				
8	21	62	400	0	0	100	0	0	0	0	330	0	120																				
9	4	62	00	0	0	0	0	0	0	0	20	0	220																				
9	18	62	00	0	0	10	0	0	0	10	10	0	290																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE & LOWER SNAKE RIVER
STATION LOCATION CLEARWATER RIVER AT
LEWISTON, IDAHO 097

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																							
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	10	61										0	0	2											0							0	0
10	17	61	2	24	92	17	93	5	70	5	49	0	0	1											0							0	1
11	7	61	92	21	2	20	94	8	93	6	45	0	0	0											0							0	0
11	21	61										0	0	0											0							0	0
12	5	61	2	17	92	10	93	10	71	6	57	110	0	1											0							0	0
12	19	61	56	23	92	11	89	9	51	4	53	50	0	0											0							0	0
1	2	62	92	27	14	17	2	9	93	8	39	0	0	1											0							1	0
1	16	62	92	20	14	20	2	17	93	11	32	50	0	0											0							0	0
2	6	62	14	20	92	15	2	10	70	6	49	0	0	0											0							0	0
2	20	62	92	37	14	28	52	4	40	4	27	0	0	0											0							0	0
3	6	62	14	54	90	15	92	15	2	8	8	0	0	0											0							0	0
3	20	62	14	26	92	23	2	6	45	4	41	0	0	0											0							0	0
4	3	62	47	37	92	16	97	7	2	6	34	40	0	0											0							0	0
4	17	62	92	26	14	16	97	10	2	9	39	40	0	0											0							0	0
5	8	62	14	32	2	19	92	18	37	5	26	0	0	0											0							0	0
5	22	62	14	31	2	12	92	10	37	5	42	190	0	0											0							0	0
6	5	62	2	32	14	18	31	7	37	6	37	20	0	0											0							1	0
6	19	62	2	30	14	20	52	7	37	6	37	20	0	0											0							1	0
7	3	62	14	27	2	23	92	11	31	7	32	0	0	1											0							0	0
7	17	62	2	27	92	22	14	9	31	6	36	0	0	0											0							0	0
8	8	62	92	26	93	11	14	10	16	8	45	20	0	3											0							0	0
8	21	62	2	26	92	22	16	4	14	4	44	0	0	34	15	2	11	1							3	50	1					0	0
9	4	62	2	20	14	17	92	17	97	6	40	0	0	10	16	1									0							0	0
9	18	62	2	24	92	11	16	9	14	6	50	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	IDAHO
MAJOR BASIN	PACIFIC NORTHWEST
MINOR BASIN	MIDDLE ✤ LOWER SNAKE RIVER
STATION LOCATION	CLEARWATER RIVER AT LEWISTON, IDAHO

97

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	10	61	13.0	9.4	7.1	-	-	-	-	-	-	24	16	9	4	1	-	60	-
10	17	61	13.0	10.2	7.1	-	-	-	-	-	-	18	14	12	4	1	-	58	-
10	24	61	9.5	11.4	6.9	-	-	-	-	-	-	19	20	13	4	2	.0	58	700
10	31	61	8.5	12.4	6.9	-	-	-	-	-	-	21	16	16	8	2	-	60	510
11	4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	370
11	7	61	6.0	12.8	6.8	-	-	-	-	-	-	20	12	13	5	2	-	55	240
11	14	61	6.0	13.4	7.0	-	-	-	-	-	-	22	14	11	4	2	-	54	370
11	21	61	3.0	13.8	7.0	-	-	-	-	-	7	27	16	10	4	2	-	72	130
11	28	61	3.0	13.6	6.9	-	-	-	-	-	2	25	16	9	3	2	-	66	170
12	5	61	6.0	13.0	7.1	-	-	-	-	-	-	27	18	10	4	2	-	85	2200
12	12	61	4.0	13.8	7.1	-	-	-	-	-	-	32	22	10	4	2	-	85	75
12	19	61	5.0	13.0	7.3	-	8	-	-	-	-	28	20	10	4	2	-	90	600
12	26	61	4.0	12.6	7.3	-	-	-	-	-	6	25	22	10	4	2	.0	93	510
1	2	62	5.0	13.8	7.3	-	-	-	-	-	4	26	16	10	4	2	.0	73	230
1	9	62	6.0	10.0	7.3	-	-	-	-	-	-	22	20	200	250	7	-	58	300
1	16	62	4.0	13.4	7.3	-	10	-	-	-	-	24	16	15	8	2	-	77	230
1	23	62	4.0	13.6	7.2	-	-	-	-	-	4	28	16	9	9	2	.0	80	33
1	30	62	4.0	13.6	7.3	-	-	-	-	-	2	26	18	9	4	2	.0	67	100
2	6	62	4.0	13.2	7.3	-	-	-	-	-	-	25	18	17	9	2	-	85	470
2	13	62	5.0	12.6	7.3	-	20	-	-	-	-	26	18	90	65	2	-	74	1200
2	20	62	7.0	12.0	7.2	-	-	-	-	-	-	28	20	27	18	4	-	84	1000
2	27	62	4.0	14.0	7.3	-	-	-	-	-	-	29	18	12	5	2	-	82	-
3	6	62	5.0	13.6	7.3	-	-	-	-	-	-	27	18	11	4	2	-	70	100
3	13	62	6.0	13.6	7.3	-	-	-	-	-	-	27	20	53	30	5	-	78	230
3	20	62	9.0	11.8	7.3	-	10	-	-	-	-	28	20	100	75	18	-	76	330
3	27	62	8.0	12.8	7.3	-	-	-	-	-	3	24	18	360	550	25	.0	55	1800
4	3	62	9.0	11.6	7.3	-	-	-	-	-	2	24	18	58	38	7	.0	54	500
4	10	62	8.0	12.4	7.3	-	13	-	-	-	3	19	16	57	32	6	.0	55	230
4	17	62	9.0	12.0	7.3	-	-	-	-	-	-	15	14	34	20	5	-	30	100
4	24	62	10.0	11.4	7.3	-	-	-	-	-	4	17	9	28	16	4	.0	26	120
5	1	62	9.0	11.6	7.2	-	-	-	-	-	3	19	12	21	9	3	.0	44	530
5	8	62	8.0	11.6	7.3	-	-	-	-	-	3	16	18	22	8	3	.0	36	600
5	15	62	10.0	11.4	6.9	-	-	-	-	-	-	15	10	18	7	2	-	40	970
5	22	62	10.0	11.8	7.1	-	-	-	-	-	3	15	10	20	10	2	.0	51	330
5	29	62	12.0	12.0	7.0	-	-	-	-	-	6	14	10	27	11	3	.0	23	2200
6	5	62	11.0	11.6	7.1	-	-	-	-	-	2	18	12	18	7	2	-	48	-
6	12	62	13.0	10.2	7.3	-	-	-	-	-	3	19	10	15	6	2	.0	77	300
6	19	62	15.0	9.8	7.1	-	-	-	-	-	5	15	12	20	8	2	.0	34	280
5	26	62	17.0	8.2	7.0	-	-	-	-	-	-	21	10	15	7	2	-	[illegible]	1000

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE & LOWER SNAKE RIVER
STATION LOCATIONCLEARWATER RIVER AT
LEWISTON, IDAHO 97

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	700
7	3	62	17.0	8.4	7.1	-	-	-	-	-	-	19	10	18	6	2	-	72	-
7	10	62	20.0	7.6	7.1	-	8	-	-	-	-	20	12	15	6	2	-	67	300
7	17	62	21.0	7.0	7.1	-	-	-	-	-	-	25	20	15	5	4	-	70	30
7	24	62	23.0	6.0	7.0	-	-	-	-	-	-	21	12	12	4	2	-	65	30
7	31	62	24.0	6.2	7.0	-	-	-	-	-	4	25	16	13	4	1	-	63	300
8	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
8	8	62	21.0	6.8	7.0	-	-	-	-	-	4	29	12	11	4	2	.0	68	-
8	14	62	23.0	6.0	7.0	-	8	-	-	-	-	27	20	13	5	2	-	68	200
8	21	62	23.0	5.6	7.1	-	-	-	-	-	-	28	16	11	4	2	-	76	530
8	28	62	20.0	7.2	7.4	-	-	-	-	-	-	25	16	12	4	2	-	54	400
9	4	62	20.0	6.6	7.1	-	-	-	-	-	-	31	20	12	4	1	-	79	930
9	11	62	17.0	7.6	7.1	-	13	-	-	-	-	34	30	15	4	5	-	87	4700
9	18	62	17.0	7.8	7.1	-	-	-	-	-	-	29	18	17	7	2	-	76	200
9	25	62	20.0	8.2	7.1	-	-	-	-	-	-	29	20	11	4	2	-	81	490

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Spalding, Idaho
Data Supplied by U.S. Geological Survey

STATE	Idaho
MAJOR BASIN	Pacific Northwest
MINOR BASIN	Middle and Lower Snake River
STATION LOCATION	Clearwater River at Lewiston, Idaho

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	3.480	4.300	4.280	5.780	5.200	6.050	16.800	29.900	51.000	17.000	4.810	3.000
2	3.230	4.400	5.350	4.900	5.200	6.370	18.500	28.700	52.000	17.000	4.670	2.800
3	3.230	4.300	4.690	4.480	5.580	5.730	20.400	33.800	52.000	16.000	4.650	2.700
4	3.010	4.120	5.660	5.580	5.970	5.350	23.000	37.000	50.000	13.600	4.540	2.600
5	3.030	4.100	5.050	6.210	6.290	5.050	25.500	40.200	44.000	12.800	4.760	2.600
6	2.880	4.200	5.050	5.660	6.290	5.050	36.800	37.700	37.600	12.300	5.030	2.600
7	2.970	3.880	4.690	5.500	7.200	5.100	61.000	36.600	33.500	12.400	4.650	2.500
8	3.740	3.720	4.280	15.500	7.200	5.200	64.000	41.300	30.800	11.500	4.740	2.400
9	3.740	3.720	4.020	29.800	8.740	5.430	43.100	53.300	31.000	10.900	4.940	2.400
10	3.370	3.860	3.580	18.300	8.910	5.500	33.400	58.900	38.600	10.400	4.430	2.400
11	3.740	4.120	2.610	11.600	10.200	4.980	27.100	57.800	40.600	10.100	4.410	2.900
12	5.400	4.330	2.250	10.200	11.700	4.690	24.300	53.900	39.100	9.720	4.480	4.630
13	5.480	4.330	2.350	9.790	13.400	4.620	24.300	48.900	38.000	9.390	4.260	3.800
14	5.310	4.040	3.800	8.710	13.000	4.480	27.700	45.800	38.000	9.250	3.400	3.300
15	4.900	3.780	4.480	7.790	13.900	4.550	34.400	41.800	36.900	8.900	3.300	3.100
16	4.710	4.050	3.960	6.950	13.000	4.830	42.700	44.500	35.800	8.530	3.200	3.000
17	4.440	3.460	3.830	6.530	11.500	5.200	40.500	44.500	37.200	8.300	3.100	2.800
18	4.200	2.290	3.830	6.370	11.600	5.580	40.500	46.100	36.200	7.020	3.100	2.700
19	4.330	1.720	3.640	5.970	11.600	6.450	49.000	48.500	38.000	6.840	3.200	2.600
20	4.080	3.560	3.710	5.200	10.900	7.200	60.200	49.400	36.000	6.650	3.200	2.500
21	4.170	3.530	4.620	4.550	9.970	9.930	65.600	48.500	35.000	6.400	3.200	2.500
22	4.200	3.700	5.000	3.350	8.910	9.640	51.200	45.300	32.000	6.200	3.100	2.400
23	4.200	3.400	4.900	3.110	8.390	9.360	45.700	44.500	30.000	5.980	3.000	2.300
24	4.300	4.290	4.830	3.460	7.280	9.170	48.200	50.200	27.000	5.850	3.000	2.300
25	3.800	4.300	4.830	4.000	6.780	12.800	59.100	58.000	26.000	5.680	3.000	2.300
26	3.700	4.280	4.980	5.000	5.660	18.300	54.500	59.700	27.000	5.580	2.900	2.300
27	4.000	4.280	4.480	5.660	4.620	31.700	46.700	55.300	25.000	5.540	2.800	2.200
28	4.670	4.280	4.150	5.970	5.130	28.800	47.100	55.000	22.000	5.700	2.700	2.500
29	4.300	3.930	4.090	6.290		22.100	39.700	61.000	20.000	5.700	3.400	4.200
30	3.940	4.020	4.620	5.500		18.300	33.800	58.800	18.000	5.560	3.600	4.800
31	3.800		5.970	5.350		16.600		54.400		5.300	3.200	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN CLINCH RIVER
STATION LOCATION CLINCH RIVER ABOVE
KINGSTON, TENNESSEE 106

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
3	2	62	4	27	1	1	0	1	1	1	15	4	122	7	137	8						
3	2	62	7	19	2	4	0	3	2	5	13	10	108	9	121	13						
3	14	62	4	20	1	1	0	1	1	1	44	6	134	7	178	9						
3	28	62	4	27	0	1	0	1	0	1	13	4	409	10	422	11						
4	4	62	4	30	0	0	0	1	0	1	50	5	1066	17	1116	18						
4	15	62	6	13	0	0	0	0	0	0	19	6	392	11	411	13						
4	25	62	7	19	0	1	0	1	0	1	68	8	128	9	196	12						
4	28	62	7	19	0	0	0	0	0	0	145	10	1	5	146	11						
5	1	62	6	15	0	1	0	1	0	1	4	6	148	10	152	12						
5	9	62	6	26	0	1	1	1	1	1	59	7	63	7	122	10						
6	6	62	7	9	0	1	0	0	0	1	12	6	88	9	100	11						
6	6	62	8	10	0	0	0	0	0	0	16	3	217	5	233	6						
6	13	62	8	10	2	2	0	1	2	2	209	6	335	6	544	8						
6	20	62	8	2	4	2	0	1	4	2	195	13	127	9	322	16						
6	27	62	8	22	1	1	0	1	1	1	118	10	307	13	425	16						
7	5	62	8	17	1	1	0	1	1	1	76	8	174	10	250	13						
7	11	62	9	4	1	3	0	1	1	3	148	31	391	12	539	33						
7	23	62	9	4	0	1	0	1	0	1	17	7	26	8	43	11						
7	25	62	9	13	0	1	0	0	0	1	65	8	205	12	270	14						
7	31	62	9	4	2	2	0	1	2	2	98	9	177	10	275	13						
8	6	62	9	5	5	4	1	1	6	4	170	26	79	6	249	27						
8	15	62	10	13	-	-	-	-	-	-	36	6	170	10	206	13						
8	20	62	9	19	7	5	0	1	7	5	265	37	30	7	295	38						
8	22	62	10	10	2	2	0	1	2	2	74	14	5	6	79	15						
9	5	62	11	15	0	0	0	1	0	1	3	5	12	7	15	9						
9	12	62	10	26	1	1	0	1	1	1	130	9	7	7	137	11						
9	19	62	11	9	1	1	0	0	1	1	52	7	414	14	466	16						
9	26	62	11	7	0	0	0	1	0	1	16	7	63	9	79	11						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN CLINCH RIVER
STATION LOCATION CLINCH RIVER ABOVE
KINGSTON, TENNESSEE 106

DATE OF SAMPLE			ALGAE *(Number per milliliter)*										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED *(Pigmented)*		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE		CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
2	19	62	1200	0	0	0	0	40	0	310	870		40	210	79	1	87	1																
3	7	62	800	0	0	20	0	0	0	40	730		20	150	87	1	82	1																
3	19	62	300	0	0	0	0	20	0	70	250		20	180																				
4	16	62	500	0	40	40	0	20	0	190	210		150	150																				
5	9	62	1100	0	0	0	0	0	0	210	930		0	80	82	2	87	2																
5	21	62	6300	0	170	20	0	130	80	1100	4770		250	2740	87	4	82	4	71	3	92	2	69	1										
6	4	62	7000	0	0	80	0	0	40	500	6330		480	1880	87	5	82	4	92	1	69	1	88	1										
6	20	62	2900	0	0	0	0	0	20	170	2750		0	600	82	3	87	3																
7	2	62	2400	0	0	20	20	60	0	190	2090		120	640	87	3	82	2																
7	16	62	4800	0	0	0	0	20	0	480	4260		120	330	87	4	82	4	68	1	69	1												
7	31	62	4500	0	40	0	0	0	20	410	4020		170	660	87	4	82	4	81	1	68	1	69	1	88	1	85	1						
8	14	62	19400	210	170	3880	0	130	130	3630	11270		3930	6080	68	5	73	5	92	5	82	4	25	4	87	4	88	4	38	3	44	2	40	2
8	28	62	3200	0	0	80	0	0	0	630	2450		800	2450	87	3	82	3	68	2	81	1	69	1	73	1								
9	17	62	800	0	0	140	0	20	0	140	520		110	6300	82	1																		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN CLINCH RIVER
STATION LOCATION CLINCH RIVER ABOVE
KINGSTON, TENNESSEE 106

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA								
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
2	19	62	62	27	15	15	65	13	36	8	37	150	0	0											0							0	0
3	7	62	65	22	36	18	62	18	71	12	30	20	0	9	15	1									1							0	0
3	19	62	62	20	65	17	36	16	15	13	34	0	0	0											0							0	1
4	16	62	65	19	62	17	36	15	86	4	45	20	0	0											0							0	0
5	9	62	36	43	65	27	62	10	92	2	18	0	0	1											1							0	0
5	21	62	36	31	65	30	62	18	92	7	14	0	0	6											7	51	2					0	0
6	4	62	65	41	36	29	62	13	47	7	10	0	0	3											1							0	0
6	20	62	36	36	65	31	47	9	31	5	19	0	0	6											1							0	0
7	2	62	36	28	65	27	31	6	62	5	34	0	0	3											0							0	0
7	16	62	65	37	36	33	62	9	47	7	14	0	0	–											–							–	–
7	31	62	65	39	36	27	25	7	31	5	22	0	0	10											0							0	0
8	14	62	27	49	2	11	36	9	91	7	24	0	0	1020	22	7	2	6	15	5	16	4	21	4	0							0	0
8	28	62	65	27	36	22	62	7	25	6	38	0	0	42	15	3	4	1							6	50	2					1	0
9	17	62	36	27	65	16	62	15	16	9	33	20	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN CLINCH RIVER
STATION LOCATION CLINCH RIVER ABOVE
KINGSTON, TENNESSEE 106

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
5	9	62	6	13	8920#	53	24	29	0	7	8	1	1	6	0	3	1	0	5
6	13	62	9	17	12120#	76	26	50	1	5	9	1	0	7	1	4	2	0	5
9	17	62	10	5	4840	128	27	101	1	8	8	1	1	6	0	3	3	1	3

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN CLINCH RIVER
STATION LOCATION CLINCH RIVER ABOVE
KINGSTON, TENNESSEE 106

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
1	31	62	-	-	-	-	-	-	-	-	4	96	112	-	-	18	.0	116	-
2	6	62	-	-	-	-	-	-	-	-	4	94	148	5	60	15	.0	120	-
2	9	62	-	-	-	-	-	-	-	-	3	92	140	5	225	14	.1	127	-
2	12	62	-	-	-	-	-	-	-	-	4	92	140	5	725	15	.0	131	-
3	11	62	-	-	-	-	-	-	-	-	4	24	102	5	0	20	-	-	-
3	21	62	-	-	7.9	-	-	-	-	-	8	72	88	10	25	24	1.1	-	-
3	28	62	-	-	-	-	-	-	-	-	12	82	116	5	0	24	.0	-	-
4	15	62	-	-	-	-	-	-	-	-	3	84	104	5	0	14	.0	-	-
4	25	62	-	-	-	-	-	-	-	-	5	-	-	5	25	15	-	108	-
5	19	62	-	-	7.6	-	-	-	-	-	3	88	96	5	0	11	.0	98	-
6	6	62	-	-	-	-	-	-	-	-	5	76	92	0	25	12	.1	95	-
6	13	62	-	-	-	-	-	-	-	-	4	76	92	5	125	16	.2	113	-
6	20	62	-	-	-	-	-	-	-	-	4	80	100	0	220	15	.0	113	-
7	5	62	-	-	8.1	-	-	-	-	-	6	82	112	5	240	19	.5	-	-
7	11	62	-	-	-	-	-	-	-	-	5	88	100	5	290	-	-	120	-
8	13	62	-	-	-	-	-	-	-	-	7	84	100	0	62	20	.1	130	-
8	27	62	-	-	-	-	-	-	-	-	5	96	100	5	*25	13	.0	130	-
9	4	62	-	-	-	-	-	-	-	-	2	88	104	0	*25	12	.0	133	-
9	17	62	-	-	-	-	-	-	-	-	5	96	116	5	*25	10	.0	127	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Scarboro, Tennessee
Operated by U.S. Geological Survey

STATE	Tennessee
MAJOR BASIN	Tennessee River
MINOR BASIN	Clinch River
STATION LOCATION	Clinch River above Kingston, Tennessee

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	4.040	7.390	4.540	2.590	19.800	11.700	1.500	7.350	5.120	4.800	5.010	4.640
2	3.680	6.490	3.770	3.170	20.200	19.900	1.140	6.610	4.970	4.170	4.990	4.290
3	5.890	6.330	2.350	4.990	20.000	19.800	1.950	7.270	4.900	5.750	4.990	2.700
4	5.790	4.680	2.640	3.870	19.800	19.600	2.950	7.370	2.840	5.790	4.400	3.220
5	5.730	2.700	4.280	3.180	19.300	19.400	2.550	7.370	5.270	5.810	.435	4.390
6	5.550	3.640	3.780	3.130	12.800	19.700	2.780	7.410	5.010	6.030	.433	4.620
7	4.840	5.030	3.690	7.030	8.430	19.600	1.840	7.390	4.880	5.130	.348	4.910
8	2.950	4.570	3.810	6.170	8.470	20.100	1.780	7.830	5.170	2.970	.260	4.610
9	.330	4.560	5.050	5.870	9.210	16.600	1.540	7.930	4.670	2.380	.232	4.120
10	.266	4.560	3.470	5.130	9.630	11.500	2.060	5.310	3.490	5.150	.208	4.400
11	2.820	4.390	2.290	8.090	9.030	14.700	4.270	7.230	3.600	4.670	.205	4.870
12	3.010	2.100	3.720	8.150	8.870	14.400	6.070	5.910	6.110	5.170	.166	4.820
13	2.900	2.530	3.090	8.310	8.790	16.900	4.670	1.490	5.490	5.690	2.500	4.810
14	3.280	5.650	1.710	7.150	8.710	20.100	3.380	.672	2.850	5.730	3.500	4.670
15	3.620	5.030	1.040	6.030	8.590	20.400	2.050	4.720	4.140	5.910	3.600	3.770
16	3.770	4.820	.973	3.260	8.550	20.200	2.530	4.460	4.150	5.790	3.680	4.150
17	5.330	4.740	4.360	2.620	7.030	20.000	2.310	4.650	.420	5.630	4.620	3.740
18	4.800	4.670	9.230	2.070	5.910	19.900	2.390	4.610	.981	5.390	5.170	3.640
19	4.700	2.400	6.350	1.370	6.450	19.800	2.580	4.400	4.130	5.430	4.870	1.780
20	6.410	5.030	4.950	3.760	6.830	16.300	1.680	1.870	4.520	5.490	4.200	3.460
21	6.630	5.610	4.340	3.400	7.190	16.100	3.170	2.800	4.740	5.590	5.610	4.030
22	5.930	4.370	3.770	6.010	5.660	13.100	5.510	3.590	4.400	5.310	6.440	3.160
23	5.930	3.830	3.510	9.920	7.810	18.000	6.550	3.020	4.530	5.570	6.560	3.680
24	5.990	.978	3.180	10.300	10.200	17.800	5.790	3.030	5.070	5.870	6.560	1.310
25	6.030	4.080	.840	10.200	10.500	13.800	6.490	3.110	4.910	6.070	5.900	4.890
26	6.050	2.020	.913	9.870	12.700	9.630	5.830	3.030	5.350	3.720	4.610	5.080
27	6.170	2.710	4.050	9.330	14.800	3.150	5.470	2.900	5.090	2.340	3.680	5.220
28	5.710	4.630	4.650	11.800	12.600	1.220	5.490	2.970	4.150	3.720	3.960	5.660
29	5.670	7.070	4.310	11.200		.994	5.950	5.120	1.540	4.760	4.150	5.510
30	4.990	4.690	3.670	17.700		.896	5.950	6.010	2.520	5.650	4.500	5.390
31	7.090		3.570	19.900		1.250		3.990		4.950	4.800	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN CLINCH RIVER
STATION LOCATION CLINCH RIVER AT
CLINTON, TENNESSEE 119

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	2	69	8	3	0	0	0	0	0	0	2	5	9	6	11	7						
7	9	62	8	6	0	0	0	1	0	1	3	6	5	9	8	11						
7	16	62	8	3	0	0	0	1	0	1	1	5	8	7	9	8						
7	23	62	9	20	0	1	0	1	0	1	0	3	0	6	0	6						
8	27	62	10	1	0	1	0	0	0	1	9	5	8	7	17	8						
9	11	62	9	26	0	0	0	1	0	1	3	6	2	8	5	10						
9	18	62	10	13	-	-	-	-	-	-	3	5	10	6	13	7						
9	24	62	10	16	0	1	0	1	0	1	9	6	4	6	13	8						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN CLINCH RIVER
STATION LOCATION CLINCH RIVER AT
CLINTON, TENNESSEE 119

DATE OF SAMPLE			ALGAE *(Number per milliliter)*									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED *(Pigmented)*		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
6	18	62	4200	0	190	60	100	0	40	120	3640	20	210	82	5	87	2	17	1														
7	2	62	300	0	0	0	0	130	0	0	210	0	40																				
7	16	62	700	0	0	0	0	40	0	170	500	40	40	82	1	68	1																
7	30	62	400	0	0	0	0	0	0	170	250	40	0																				
8	20	62	500	0	0	0	0	0	0	170	300	40	300	68	1																		
9	18	62	00	0	0	0	0	0	0	0	40	0	0																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN CLINCH RIVER
STATION LOCATION CLINCH RIVER AT
CLINTON, TENNESSEE 119

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
															GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
6	18	62	36	74	65	11	47	4	62	4	7	0	0	4											0							4	0
7	2	62	36	28	65	21	25	12	31	8	31	0	0	0											1							0	1
7	16	62	36	31	25	20	65	14	47	6	29	0	0	1											0							0	0
7	30	62	25	32	36	16	15	9	65	7	36	0	0	6											0							0	3
8	20	62	15	15	36	15	2	8	65	8	54	0	0	2											0							0	0
9	18	62	65	17	16	14	36	12	2	9	48	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN CLINCH RIVER
STATION LOCATION CLINCH RIVER AT
CLINTON, TENNESSEE 119

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	2	62	-	-	-	-	-	-	-	-	3	92	104	5	*25	13	.0	150	-
7	9	62	-	-	7.6	-	-	-	-	-	4	92	60	-	-	12	.0	125	-
7	16	62	-	-	-	-	-	-	-	-	3	88	104	0	25	12	.0	103	-
7	23	62	-	-	-	-	-	-	-	-	5	56	96	0	25	16	.0	98	-
8	27	62	-	-	-	-	-	-	-	-	3	94	116	0	-	10	.0	114	-
9	11	62	-	-	-	-	-	-	-	-	3	100	124	0	25	12	.0	120	-
9	18	62	-	-	-	-	-	-	-	-	5	104	108	5	*25	13	.0	133	-
9	23	62	-	-	-	-	-	-	-	-	4	104	124	0	*25	13	.0	140	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Norris Dam, Tennessee
Operated by U.S. Geological Survey

STATE	Tennessee
MAJOR BASIN	Tennessee River
MINOR BASIN	Clinch River
STATION LOCATION	Clinch River at Clinton, Tennessee

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	3.510	6.430	4.470	2.110	18.700	11.200	.082	7.150	4.950	4.320	5.190	4.400
2	5.380	6.260	1.820	4.440	19.000	17.400	.082	6.380	5.020	5.090	5.230	2.130
3	5.840	6.280	1.960	3.510	19.000	17.600	2.560	7.200	2.100	5.770	5.170	3.170
4	5.630	2.300	4.300	2.230	18.900	17.900	2.000	7.200	4.870	5.800	.136	4.630
5	5.610	3.180	3.790	2.550	16.000	18.200	2.740	7.260	4.870	5.880	.231	4.660
6	5.380	5.110	3.410	3.140	9.490	18.600	.238	7.280	4.980	6.040	.055	4.790
7	3.520	4.700	4.020	5.700	7.830	18.900	.090	7.310	4.730	2.980	.211	4.630
8	.086	4.470	4.650	4.920	8.050	19.000	.090	8.190	5.150	1.890	.055	3.960
9	.214	4.530	2.220	5.480	8.030	9.820	.090	7.140	3.240	4.860	.226	4.130
10	2.570	4.500	.070	7.470	8.000	10.800	1.280	5.470	3.230	4.970	.052	5.060
11	2.820	2.110	.070	7.560	8.080	12.100	.103	7.130	5.500	4.730	.218	4.730
12	2.790	1.170	.074	7.770	8.110	13.600	.103	2.330	5.360	5.680	1.060	4.810
13	3.020	5.320	.070	7.770	8.110	17.000	2.130	.090	3.200	5.780	3.700	4.710
14	3.420	5.720	.070	6.560	8.080	19.500	.096	4.420	3.600	5.890	3.700	3.490
15	3.120	4.670	.070	3.160	8.080	19.400	.118	4.650	4.840	5.850	3.720	3.790
16	5.120	4.470	.070	1.210	7.370	19.300	1.890	4.440	.096	6.130	4.710	1.290
17	4.710	4.570	.074	1.900	6.380	19.300	.601	4.460	.086	5.590	5.230	2.600
18	4.450	2.560	.078	.556	5.480	19.200	2.280	4.580	4.480	5.490	5.200	.688
19	4.930	2.620	1.930	3.290	6.160	17.200	.090	1.600	4.680	5.570	4.140	3.930
20	6.660	6.760	3.360	2.300	6.460	13.700	2.090	1.670	4.550	5.700	4.850	3.980
21	6.010	4.750	2.480	4.630	5.630	9.520	4.750	4.200	4.650	5.300	6.150	2.830
22	6.030	4.300	2.750	5.300	2.970	12.800	5.340	2.650	4.600	5.580	6.460	3.720
23	6.010	.093	2.840	7.800	.090	16.800	5.900	2.690	5.060	5.920	6.400	.074
24	6.160	3.770	.070	7.240	2.460	15.200	5.810	2.800	4.160	6.150	6.430	5.630
25	5.910	1.790	.070	7.500	8.110	10.400	5.360	2.940	5.490	5.290	4.250	5.540
26	6.180	1.720	3.310	7.660	8.170	5.580	5.480	2.810	5.430	2.180	3.210	4.870
27	6.230	3.990	3.720	3.840	5.200	.082	5.350	2.090	4.180	3.420	3.950	5.790
28	5.610	5.440	3.830	5.200	1.550	.082	5.490	5.020	1.490	4.910	3.990	5.430
29	5.600	6.330	2.810	10.400		.082	5.470	4.980	1.670	4.960	4.230	5.300
30	5.350	4.450	3.250	17.300		.082	6.650	4.660	5.310	5.760	4.310	3.900
31	7.230		1.860	18.400		.082		5.060		5.140	4.350	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	ARIZONA
MAJOR BASIN	COLORADO RIVER
MINOR BASIN	LOWER COLORADO RIVER
STATION LOCATION	COLORADO RIVER AT YUMA, ARIZONA

3

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	12	-	-	-	-	-	-	3	27	50	50	53	57						
10	9	61	10	18	-	-	-	-	-	-	0	28	1	51	1	58						
11	6	61	11	17	2	9	4	14	6	17	46	79	94	95	140	124						
11	13	61	11	22	-	-	-	-	-	-	46	49	87	75	133	90						
11	20	61	11	30	-	-	-	-	-	-	18	53	68	80	86	96						
11	27	61	12	7	2	3	0	7	2	8	11	20	15	28	26	34						
12	4	61	12	12	-	-	-	-	-	-	11	26	47	36	58	44						
12	11	61	12	19	-	-	-	-	-	-	20	56	10	79	30	97						
12	18	61	12	28	-	-	-	-	-	-	0	51	60	81	60	96						
12	26	61	1	5	3	5	1	13	4	14	13	40	43	57	56	70						
1	2	62	1	10	-	-	-	-	-	-	6	53	85	87	91	102						
1	8	62	2	12	-	-	-	-	-	-	59	52	77	75	136	91						
1	15	62	1	24	-	-	-	-	-	-	6	41	21	62	27	74						
1	22	62	1	30	2	5	10	15	12	16	0	40	45	59	45	71						
1	29	62	2	7	-	-	-	-	-	-	70	108	105	156	175	190						
2	5	62	2	14	-	-	-	-	-	-	5	55	68	77	73	85						
2	12	62	2	23	-	-	-	-	-	-	24	51	36	83	60	97						
2	19	62	3	6	-	-	-	-	-	-	164	105	46	159	210	191						
2	26	62	3	9	2	5	6	14	8	15	37	39	109	59	146	71						
3	5	62	3	27	-	-	-	-	-	-	0	49	35	68	35	84						
3	12	62	3	23	-	-	-	-	-	-	0	52	33	80	33	95						
3	19	62	4	3	-	-	-	-	-	-	10	51	62	72	72	88						
3	26	62	4	6	0	6	8	16	8	17	0	40	87	58	87	70						
4	2	62	4	20	-	-	-	-	-	-	14	53	0	52	14	74						
4	9	62	4	27	-	-	-	-	-	-	0	71	10	76	10	104						
4	16	62	4	30	-	-	-	-	-	-	37	53	87	76	124	93						
4	30	62	6	25	7	7	3	9	10	12	20	46	0	45	20	64						
5	14	62	6	22	-	-	-	-	-	-	37	32	75	45	112	55						
5	21	62	6	26	-	-	-	-	-	-	40	54	121	74	161	92						
5	28	62	6	28	0	4	3	5	3	6	54	55	56	51	110	75						
6	4	62	7	2	-	-	-	-	-	-	18	53	60	79	78	95						
6	11	62	7	31	-	-	-	-	-	-	8	44	45	68	53	81						
6	18	62	7	12	-	-	-	-	-	-	12	113	53	140	65	180						
7	2	62	7	31	-	-	-	-	-	-	74	73	2	57	76	93						
7	9	62	8	14	-	-	-	-	-	-	24	54	62	72	86	90						
7	16	62	10	2	-	-	-	-	-	-	18	53	113	77	131	93						
7	23	62	8	10	5	5	2	14	7	15	0	54	32	86	32	102						
8	6	62	8	28	-	-	-	-	-	-	26	50	87	68	113	84						
8	13	62	10	6	-	-	-	-	-	-	54	57	125	74	179	93						
8	20	62	9	19	-	-	-	-	-	-	5	7	88	87	93	87						
8	27	62	9	10	1	4	0	4	1	6	37	49	27	71	64	86						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	ARIZONA
MAJOR BASIN	COLORADO RIVER
MINOR BASIN	LOWER COLORADO RIVER
STATION LOCATION	COLORADO RIVER AT YUMA, ARIZONA

3

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
9	4	62	10	1	-	-	-	-	-	-	231	69	34	92	265	115						
9	24	62	10	18	1	5	0	11	1	12	10	47	91	77	101	90						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ARIZONA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
YUMA, ARIZONA

3

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	1300	0	0	20	0	20	0	440	850	20	170	68	2	91	1	87	1	88	1	89	1	75	1								
10	16	61	300	0	0	20	0	0	0	80	230	0	100																				
11	6	61	1200	20	0	20	0	20	0	150	970	0	60	92	1																		
11	13	61	600	0	0	0	0	0	0	60	560	0	20																				
11	27	61	1300	0	0	0	0	40	0	120	1140	0	250	75	2																		
12	18	61	300	0	0	0	0	0	0	20	250	0	20																				
12	26	61	1200	0	0	20	0	20	0	250	920	0	600	92	1	87	1	68	1														
1	2	62	800	0	0	0	0	0	0	70	690	0	250	92	1																		
1	15	62	1100	0	0	0	0	60	0	100	890	0	230	87	2																		
2	5	62	4400	0	0	0	20	20	0	290	4100	40	680	87	4	75	2	91	2	88	1												
2	19	62	6200	0	0	20	20	5270	0	340	560	20	890	57	6																		
3	19	62	1400	0	0	20	0	50	0	540	750	0	290	68	2	92	1																
4	2	62	2500	20	0	0	0	100	0	640	1760	20	310	68	2	88	2	81	1	87	1												
4	16	62	2000	0	0	270	0	0	0	380	1390	40	1200	87	2	68	2	75	2	88	1												
4	30	62	2500	0	0	270	0	0	80	440	1730	110	1220	75	2	71	1	68	1	87	1												
5	14	62	1800	0	0	130	20	60	0	100	1510	20	170	75	1	88	1	81	1	87	1												
6	4	62	900	0	0	290	0	160	0	20	410	0	200	38	1	57	1																
6	18	62	1500	20	60	190	0	110	0	60	1010	20	510	75	1	87	1	88	1	92	1												
7	2	62	4200	20	0	640	20	150	60	390	2900	60	290	75	3	68	2	88	1	38	1	87	1	92	1	33	1						
7	16	62	2200	0	0	320	0	0	0	720	1180	80	460	68	3	88	2	75	1	87	1												
8	6	62	17700	16560	0	210	0	0	0	290	620	0	40	4	7	68	1	87	1	92	1												
8	27	62	800	0	0	80	0	0	0	40	660	40	40	92	1																		
9	4	62	600	50	0	140	0	0	0	0	340	90	110																				
9	17	62	3300	0	0	130	0	0	0	380	2830	0	930	92	3	88	3	83	2	87	2	68	1	76	1								
9	24	62	800	30	0	180	0	0	0	80	530	10	180	87	1	88	1																

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ARIZONA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
YUMA, ARIZONA 003

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	11	67	87	6	75	6	6	5	16	0	0	0											0							0	0
10	16	61	7	14	94	8	26	7	87	6	65	0	0	0											1							2	0
11	6	61	94	22	7	20	75	6	65	6	46	0	0	4											6	50	1					0	0
11	13	61	94	17	7	12	11	7	6	6	58	20	0	7											4	50	1					0	0
11	27	61	7	25	11	8	6	8	92	6	53	0	0	2											3							0	0
12	18	61	87	13	65	13	7	8	75	8	58	0	0	0											0							0	0
12	26	61										0	0	2											4	50	1					2	1
1	2	62	94	20	68	7	65	7	6	6	60	0	0	0											0							0	0
1	15	62	65	37	94	14	11	8	7	6	35	0	0	1											2							0	0
2	5	62	46	26	65	16	7	9	87	7	42	0	0	0											3	50	1					2	0
2	19	62	64	19	6	12	93	9	26	8	52	50	0	0											2							0	0
3	19	62	26	30	94	9	6	7	92	6	48	0	0	0											0							0	0
4	2	62	26	31	71	5	33	4	87	3	57	0	0	0											0							0	0
4	16	62	46	30	26	21	7	9	65	6	34	0	0	0											1							0	0
4	30	62	46	32	7	27	82	6	65	6	29	150	0	0											1							1	1
5	14	62	26	10	46	10	92	7	7	6	67	0	0	1											0							1	0
6	4	62	26	14	7	10	92	9	65	7	60	0	0	1											2							0	0
6	18	62	6	20	92	13	26	12	16	3	52	0	0	1											3	50	1					0	0
7	2	62	26	24	6	23	92	5	38	5	43	0	0	1											0							0	0
7	16	62	26	45	6	8	65	3	38	3	41	0	0	0											0							0	0
8	6	62										0	0	3											2							0	0
8	27	62	91	25	26	13	71	5	65	4	33	0	0	0											0							0	0
9	4	62	26	20	94	13	16	7	92	6	54	0	0	0											0							0	0
9	17	62	92	11	38	10	26	9	94	7	63	0	0	0											0							0	0
9	24	62	94	15	16	12	92	7	38	6	60	0	0	3											0							0	0

687-228 O-63—11

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE ARIZONA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
YUMA, ARIZONA

3

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END			TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY							TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS				
6	4	62	6	11	3690	280	47	233	1	13	15	3	1	11	0	4	4	1	9
7	11	62	7	17	3380	246	44	202	1	13	13	2	1	8	2	4	3	1	9
8	7	62	8	14	5150	229	37	192	1	9	11	2	1	8	0	3	3	1	9
9	5	62	9	13	5065	151	24	127	1	6	9	1	1	7	0	3	1	1	3

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ARIZONA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
YUMA, ARIZONA 3

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	23.0	-	8.2	-	-	-	-	-	1200	216	984	-	45	-	-	-	-
10	9	61	18.0	-	8.2	-	-	-	-	-	1135	224	1020	5	32	640	.5	2798	*330
10	16	61	20.0	-	8.2	-	-	-	-	-	1190	224	1060	-	-	-	-	-	-
10	23	61	19.0	-	8.2	-	-	-	-	-	1160	212	1050	-	42	-	-	-	-
11	6	61	14.0	2.7	8.1	-	-	-	-	-	1250	240	1044	5	34	587	.1	3110	-
11	13	61	13.0	10.4	8.2	-	-	-	-	-	1095	216	1012	-	32	-	-	-	-
11	20	61	14.0	12.0	8.2	-	-	-	-	-	1220	240	1132	5	25	640	.0	3149	*100
11	27	61	13.0	10.1	8.2	-	-	-	-	-	425	188	560	0	28	375	.0	1398	300
12	4	61	14.0	11.6	8.2	-	-	-	-	-	305	188	472	-	42	302	.2	1168	460
12	11	61	14.0	11.7	8.2	-	-	-	-	-	1295	272	1124	0	45	545	.0	3256	300
12	18	61	13.0	11.6	8.2	-	-	-	-	-	800	240	924	0	22	500	.0	-	230
12	26	61	12.0	12.5	8.1	-	-	-	-	-	875	224	835	-	29	-	-	-	-
1	2	62	14.0	12.7	8.2	-	-	-	-	-	1015	232	972	-	45	-	-	-	690
1	8	62	15.0	12.0	8.2	-	-	-	-	-	1275	240	1148	-	35	650	.0	3283	310
1	15	62	11.0	12.5	8.2	-	-	-	-	-	1285	240	1156	-	32	650	.0	3265	200
1	22	62	13.0	11.0	8.1	-	-	-	-	-	990	200	970	5	28	525	.0	3022	100
1	29	62	16.0	10.3	8.2	-	-	-	-	-	1240	256	1300	-	32	625	.0	3386	100
2	5	62	17.0	10.0	8.2	-	-	-	-	-	1090	228	1050	-	58	550	.0	2931	540
2	12	62	19.0	10.7	8.0	-	-	-	-	-	1525	244	1150	-	18	625	.0	3362	3800
2	19	62	16.5	9.7	8.1	-	-	-	-	-	1300	240	1340	5	32	675	-	2406	*100
2	26	62	14.0	11.0	8.1	-	-	-	-	-	1070	228	1070	0	-	625	.0	2885	-
3	5	62	16.0	11.1	8.1	-	-	-	-	-	1140	248	1130	-	30	575	.1	2855	*100
3	12	62	14.0	11.2	8.2	-	-	-	-	-	1035	204	1050	5	38	575	.0	2714	750
3	19	62	16.0	10.5	8.1	-	-	-	-	-	835	212	930	5	30	525	.0	2405	*100
3	26	62	17.0	10.2	8.1	-	-	-	-	-	860	220	900	-	25	-	-	-	400
4	2	62	21.0	12.1	8.2	-	-	-	-	.0	1130	232	990	5	24	625	.0	2899	*100
4	9	62	23.0	-	8.1	-	-	-	-	-	950	208	880	-	34	575	.1	2569	*100
4	16	62	27.0	10.6	8.1	-	-	-	-	-	950	204	840	10	31	550	.0	2532	*1
4	30	62	20.0	9.2	8.2	-	-	-	-	-	1025	224	990	-	42	600	-	2834	200
5	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
5	8	62	-	-	-	-	-	-	-	-	-	-	-	5	-	550	.0	-	-
5	14	62	19.0	9.8	8.0	-	-	-	-	-	885	220	900	-	45	512	.0	2371	100
5	21	62	20.0	9.7	8.1	-	-	-	-	-	900	208	850	5	30	525	.0	2470	*100
5	28	62	20.0	9.8	8.0	-	-	-	-	-	1025	220	1005	-	24	600	.0	2773	-
6	4	62	22.0	10.4	8.0	-	-	-	-	-	1150	220	1000	-	36	-	-	-	200
6	11	62	24.0	8.7	8.1	-	-	-	-	-	1050	220	950	5	21	-	.0	2944	700
6	18	62	24.0	8.8	8.0	-	-	-	-	-	970	228	900	5	36	675	.0	2615	200
7	2	62	26.0	8.2	8.2	-	-	-	-	-	775	196	810	5	42	450	.0	2268	-
7	9	62	27.5	8.1	8.2	-	-	-	-	-	750	196	700	0	35	500	.0	2120	300

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ARIZONA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
YUMA, ARIZONA

3

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	16	62	25.5	8.1	8.2	-	-	-	-	-	-	192	760	0	48	475	.0	2230	*100
7	23	62	28.5	7.8	8.1	-	-	-	-	-	775	200	800	5	46	450	.0	2183	100
8	6	62	26.5	8.2	8.1	-	-	-	-	-	825	188	830	5	45	500	.0	2250	*100
8	13	62	29.0	7.8	8.0	-	-	-	-	-	725	188	710	5	-	500	.0	2165	-
8	20	62	28.0	-	8.2	-	-	-	-	-	690	186	760	0	32	525	.0	2200	-
8	27	62	27.5	7.8	8.1	-	-	-	-	-	860	196	870	5	50	575	.0	2490	-
9	4	62	27.0	8.9	8.2	-	-	-	-	-	990	264	910	5	57	475	.0	2720	-
9	10	62	25.0	9.4	8.1	-	-	-	-	-	890	212	800	-	52	-	-	-	300
9	17	62	26.0	8.8	8.2	-	-	-	-	-	990	176	950	-	58	-	-	-	*100
9	24	62	26.0	10.2	8.1	-	-	-	-	-	990	224	930	0	52	625	.0	2730	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Yuma, Arizona
Operated by U.S. Geological Survey

STATE	**Arizona**
MAJOR BASIN	Colorado River
MINOR BASIN	Lower Colorado River
STATION LOCATION	Colorado River at Yuma, Arizona

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	1.060	.933	1.230	1.180	.888	.946	.996	1.120	.940	1.370	1.380	1.470
2	.960	.937	1.240	.737	.869	.906	1.010	1.130	.933	1.350	1.340	1.390
3	.902	.942	1.700	.715	.864	.977	1.000	1.070	.993	1.280	1.410	1.300
4	.900	.931	1.190	2.020	.862	1.050	1.040	1.080	.967	1.320	1.420	1.520
5	.959	.959	.684	1.990	1.180	.956	1.060	1.440	1.030	1.350	1.380	1.800
6	.878	.921	.701	.942	.901	.917	1.060	1.490	1.020	1.360	1.360	1.790
7	.899	.909	.729	.847	.813	.903	1.370	1.390	.930	1.320	1.340	1.700
8	.972	1.100	.658	.824	.912	.948	1.430	1.280	.980	1.350	1.370	1.330
9	.974	.998	.735	.829	.839	.919	1.400	1.250	.926	1.390	1.390	1.170
10	.912	.943	.836	.792	1.120	.940	1.380	1.250	1.060	1.360	1.390	1.420
11	.947	.936	.872	.793	.845	1.040	1.300	1.220	1.060	1.320	1.490	1.350
12	.910	.922	.782	1.880	.855	1.360	1.420	1.260	1.010	1.300	1.460	1.430
13	.976	.984	.826	.877	.825	1.180	1.460	1.270	.955	1.300	1.460	1.300
14	1.080	1.050	.923	.825	.823	1.220	1.440	1.290	.945	1.400	1.420	1.160
15	1.110	1.000	1.750	.813	.804	1.290	1.430	1.260	1.000	1.450	1.270	1.300
16	.976	.939	1.130	.814	.800	1.320	1.430	1.900	1.060	1.420	1.320	1.320
17	.932	.901	1.080	.893	.805	1.320	1.410	2.280	1.100	1.370	1.360	1.290
18	.935	.834	.862	.916	.847	1.330	1.430	2.150	1.290	1.340	1.440	1.480
19	.959	.885	.817	.886	.871	1.270	1.410	1.400	1.340	1.330	1.530	1.950
20	.940	.877	.767	.957	.877	1.290	1.410	1.340	1.350	1.350	1.510	1.690
21	.900	.861	.763	.998	.929	1.340	1.410	1.260	1.370	1.440	1.460	1.350
22	.929	.867	1.390	.937	1.000	1.320	1.450	1.190	1.510	1.330	1.540	1.220
23	.949	.930	1.550	.931	1.340	1.290	1.480	1.110	1.360	1.300	1.420	1.210
24	.968	.902	1.420	1.020	1.640	1.270	1.390	.990	1.390	1.300	1.210	1.270
25	.954	1.020	1.580	1.030	1.030	1.410	1.420	1.010	1.370	1.280	1.160	1.440
26	1.040	1.480	1.550	.924	1.050	1.300	1.450	1.040	1.370	1.340	1.150	1.910
27	1.020	1.470	1.050	.861	.961	1.170	1.410	1.040	1.360	1.390	1.130	1.680
28	.998	.901	.735	.880	.933	1.130	1.430	1.050	1.360	1.390	1.170	1.160
29	1.000	.667	.783	.883		1.220	1.160	1.080	1.360	1.410	1.080	1.000
30	.897	1.210	.861	.887		.933	1.070	1.060	1.350	1.350	1.170	1.120
31	.909		.766	.904		.970		.974		1.360	1.690	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE CALIFORNIA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER ABOVE
PARKER DAM, ARIZONA-CALIFORNIA 4

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	400	0	0	70	0	20	50	50	220	0	110																				
10	16	61	100	0	0	0	0	60	0	0	20	0	0																				
11	6	61	400	0	0	80	0	100	0	20	150	0	100																				
11	20	61	800	90	0	320	0	0	20	50	340	0	180																				
12	4	61	400	0	50	0	0	0	0	90	230	20	20																				
12	18	61	100	0	0	0	0	0	0	0	70	0	20																				
1	2	62	200	0	0	20	0	0	0	0	180	0	110																				
1	14	62	500	0	0	0	0	20	0	50	410	0	70	92	1																		
2	5	62	600	90	0	0	0	0	50	340	90	50	20	68	2																		
2	21	62	600	20	0	150	0	20	60	190	150	40	20																				
3	5	62	300	0	0	60	0	0	60	40	150	0	0																				
3	19	62	100	0	0	0	0	0	0	40	20	0	0																				
4	2	62	200	0	0	20	0	100	20	20	60	0	0																				
4	16	62	500	0	0	190	0	0	20	230	40	40	40	68	1																		
5	7	62	600	0	0	420	0	0	60	20	60	20	40																				
5	21	62	600	0	0	210	0	230	0	110	60	110	210																				
6	4	62	00	0	0	0	0	0	20	0	20	0	0																				
6	18	62	1200	80	0	540	0	0	100	100	330	40	120	32	1	76	1																
7	2	62	700	40	0	40	0	0	0	40	550	40	170	76	2																		
7	16	62	1100	0	0	270	0	0	60	210	590	40	170	76	2	71	1																
8	7	62	400	0	0	170	0	100	0	80	80	0	40	33	1																		
8	20	62	1500	0	0	60	0	0	0	170	1270	0	300	76	3	92	1	68	1														
9	4	62	1000	0	0	190	0	0	80	40	720	0	0	92	2	76	1																
9	17	62	200	0	0	70	0	0	20	90	0	20	0																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE CALIFORNIA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVEF
STATION LOCATION COLORADO RIVER ABOVE
PARKER DAM, ARIZONA-CALIFORNIA 004

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	4	61	8	59	91	12	26	6	70	4	19	0	0	89	17	4	18	1							16	50	2	76	1			0	0
10	16	61										0	0	19	17	2									3							0	0
11	6	61	8	44	94	8	69	4	52	4	40	0	0	20	17	2									1							0	0
11	20	61	8	43	91	21	94	6	69	6	24	160	0	68	17	4	22	1	11	1					0							0	0
12	4	61										50	0	28	17	2	11	1							2							0	0
12	18	61										0	20	23	17	2	11	1							1							0	0
1	2	62										20	0	16	17	1									2							0	0
1	14	62	91	65	8	6	69	5	25	5	19	0	0	12	17	1									1							0	0
2	5	62	25	94	91	2	89	2	92	1	1	0	0	3											4	50	1					1	0
2	21	62										150	0	5											3							0	0
3	5	62										0	0	4											1							0	0
3	19	62										0	0	4											1							0	0
4	2	62	81	16	89	17	8	14	69	7	46	0	0	1											2							0	0
4	16	62	89	35	91	17	8	15	25	12	21	0	0	13	17	1									0							0	0
5	7	62										40	0	9	11	1									4							0	0
5	21	62										320	0	3											0							0	0
6	4	62										0	0	4											4	50	1					0	0
6	18	62	8	34	91	27	74	10	92	10	19	0	0	2											0							0	0
7	2	62	8	68	89	26	65	2	47	1	3	0	0	1											1							1	0
7	16	62	8	68	91	10	94	5	84	4	13	0	0	2											0							0	0
8	7	62										0	0	78	18	4	17	3							8	50	1					-	-
8	20	62	91	48	8	19	26	4	3	2	27	0	0	81	17	4									0							0	0
9	4	62	91	75	8	12	26	5	2	2	6	0	0	17	17	2									0							0	0
9	17	62	8	43	91	28	23	9	84	4	16	160	0	136	17	4	9	4	22	1					6	50	2					0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE CALIFORNIA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER ABOVE
PARKER DAM, ARIZONA-CALIFORNIA 4

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	4	61	11	1	0	2	10	6	10	6	4	17	23	21	27	27						
10	11	61	10	27	0	2	2	3	2	4	2	17	22	20	24	26						
10	18	61	11	1	0	2	1	3	1	4	4	16	20	19	24	25						
11	6	61	11	21	0	1	12	5	12	5	1	9	31	13	32	16						
11	13	61	11	28	0	1	9	6	9	6	1	8	40	13	41	15						
11	21	61	12	1	0	1	8	5	8	5	5	8	30	13	35	15						
12	4	61	12	14	0	1	6	4	6	4	3	8	23	13	26	15						
12	11	61	12	28	0	2	5	5	5	5	0	15	17	21	17	26						
12	18	61	1	3	0	2	6	5	6	5	15	16	34	20	49	26						
1	2	62	1	15	0	1	9	6	9	6	0	11	16	16	16	19						
1	14	62	1	31	1	2	5	5	6	5	13	17	32	21	45	27						
2	5	62	2	19	0	2	10	6	10	6	26	15	42	21	68	26						
2	21	62	3	9	0	2	8	6	8	6	26	17	36	21	62	27						
3	5	62	3	20	1	2	4	5	5	5	11	16	89	22	100	27						
3	19	62	4	3	0	1	5	4	5	4	2	15	29	20	31	25						
4	2	62	4	20	0	1	5	4	5	4	0	37	13	21	13	43						
5	7	62	7	11	0	2	5	6	5	6	6	21	27	30	33	37						
5	21	62	6	27	1	2	8	5	9	5	4	22	10	22	14	31						
6	4	62	7	5	1	2	11	6	12	6	3	22	39	30	42	37						
6	18	62	7	17	0	2	8	5	8	5	0	47	17	26	17	54						
7	2	62	7	30	0	2	11	5	11	5	3	20	2	25	5	32						
7	16	62	8	8	0	2	6	6	6	6	10	26	22	34	32	43						
8	7	62	10	12	1	2	11	5	12	5	24	21	30	27	54	34						
8	20	62	9	7	0	2	9	6	9	6	1	19	13	26	14	32						
9	4	62	9	24	0	2	1	3	1	4	25	25	49	34	74	42						
9	17	62	10	10	0	1	11	6	11	6	11	23	18	33	29	40						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE CALIFORNIA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER ABOVE
PARKER DAM, ARIZONA-CALIFORNIA 4

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	26	61	11	4	5628	181	47	134	-	-	-	-	-	-	-	-	-	-	-
12	2	61	12	13	5510	171	67	104	-	-	-	-	-	-	-	-	-	-	-
12	2	61		*	11138	176	57	119	6	15	12	1	0	10	1	5	6	1	12
1	18	62	1	26	5150	144	49	95	-	-	-	-	-	-	-	-	-	-	-
3	2	62	3	9	5215	125	38	87	-	-	-	-	-	-	-	-	-	-	-
3	2	62		*	10365	134	43	91	2	12	10	1	1	8	0	4	4	1	10
4	12	62	4	20	5312	140	49	91	-	-	-	-	-	-	-	-	-	-	-
5	24	62	6	1	5435	129	53	76	-	-	-	-	-	-	-	-	-	-	-
5	24	62		*	10747	134	51	83	2	14	11	1	0	9	1	5	5	1	13
7	8	62	7	16	5222	134	50	84	-	-	-	-	-	-	-	-	-	-	-
8	22	62	8	31	6352	121	39	82	-	-	-	-	-	-	-	-	-	-	-
8	22	62		*	11574	127	44	83	1	12	12	0	2	10	0	5	4	1	9
9	29	62	10	7	5250	142	24*	118	-	-	-	-	-	-	-	-	-	-	-

* NOT SEPARATED - FILTER RECEIVED LATE

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	CALIFORNIA
MAJOR BASIN	COLORADO RIVER
MINOR BASIN	LOWER COLORADO RIVER
STATION LOCATION	COLORADO RIVER ABOVE PARKER DAM, ARIZONA-CALIFORNIA 4

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	4	61	-	-	7.8	-	-	-	-	-	86	124	276	5	0	300	-	669	-
10	11	61	-	-	7.5	-	-	-	-	-	85	120	332	5	0	290	.1	-	-
10	18	61	23.3	-	8.1	-	-	-	-	-	86	120	316	5	*25	305	.1	687	-
11	6	61	18.3	-	8.0	-	-	-	-	-	94	120	324	0	0	300	.0	-	-
11	13	61	-	-	7.9	-	-	-	-	-	88	122	312	5	*25	305	.1	657	-
11	21	61	8.0	-	-	-	-	-	-	-	85	120	312	5	-	305	.2	688	-
12	4	61	13.9	-	-	-	-	-	-	-	87	120	332	-	*25	285	.0	691	-
12	11	61	12.8	-	-	-	-	-	-	-	85	114	-	5	0	277	.1	701	-
12	13	61	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-
12	18	61	11.7	-	-	-	-	-	-	-	85	124	320	-	-	260	.1	680	-
1	2	62	11.1	-	-	-	-	-	-	-	86	120	348	-	-	280	-	-	-
1	14	62	9.4	-	-	-	-	-	-	-	87	124	332	-	*25	275	-	886	-
1	26	62	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-
2	5	62	11.1	-	-	-	-	-	-	-	82	120	324	-	-	285	.0	706	-
2	21	62	-	-	-	-	-	-	-	-	-	-	320	5	0	325	.0	673	-
2	29	62	11.7	-	-	-	-	-	-	-	96	110	-	-	-	-	-	-	-
3	5	62	13.3	-	-	-	-	-	-	-	82	80	328	5	-	265	.1	672	-
3	9	62	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
3	19	62	12.8	-	-	-	-	-	-	-	86	148	356	5	-	320	-	745	-
4	2	62	16.1	-	-	-	-	-	-	-	87	144	332	5	-	280	.0	690	-
4	20	62	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-
4	30	62	22.2	-	-	-	-	-	-	-	99	115	-	-	-	-	-	-	-
5	7	62	-	-	-	-	-	-	-	-	-	-	284	-	0	260	.0	689	-
5	21	62	22.8	-	-	-	-	-	-	-	97	109	316	5	*25	-	.0	-	-
6	4	62	23.3	-	-	-	-	-	-	-	100	109	332	5	*25	290	.0	738	-
6	18	62	26.1	-	-	-	-	-	-	-	98	111	-	-	-	-	-	-	-
7	2	62	28.3	-	-	-	-	-	-	-	97	109	-	-	-	-	-	-	-
7	16	62	-	-	-	-	18	-	-	-	-	-	344	5	*25	315	.0	740	-
8	7	62	30.0	-	8.2	-	-	-	-	-	-	-	312	0	*25	310	.0	745	-
8	20	62	26.1	-	-	-	4	-	-	-	-	-	-	0	*25	290	.0	735	-
9	4	62	27.2	-	8.0	-	-	-	-	-	-	-	304	0	*25	255	.0	727	-
9	17	62	27.8	-	-	-	-	-	-	-	-	-	316	0	*25	290	.0	695	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Parker Dam
Operated by U.S. Geological Survey

STATE	California
MAJOR BASIN	Colorado River
MINOR BASIN	Lower Colorado River
STATION LOCATION	Colorado River above Parker Dam, Arizona-California

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	7.760	5.230	4.820	4.200	3.820	9.080	13.200	11.300	11.700	13.200	14.500	11.100
2	9.350	5.400	4.020	4.700	4.450	10.200	13.400	10.900	12.000	13.200	13.500	11.500
3	8.360	5.790	3.760	4.940	4.080	9.930	13.300	9.760	12.300	13.400	13.600	11.600
4	7.520	5.630	4.580	4.580	3.950	10.200	13.300	9.990	12.200	13.500	13.800	11.000
5	7.440	5.290	4.390	5.400	5.180	10.500	12.800	10.300	12.700	13.300	14.000	10.400
6	7.510	4.880	4.080	5.540	5.510	9.390	13.900	10.300	12.700	14.200	15.000	10.400
7	8.000	4.940	3.360	5.700	5.580	8.920	14.000	11.200	11.500	14.800	14.800	11.300
8	8.010	5.510	3.560	5.660	3.880	8.960	14.100	11.600	12.500	14.600	14.500	10.700
9	8.210	5.400	3.220	5.510	3.150	10.800	14.000	11.200	12.500	14.400	14.300	10.900
10	7.880	5.630	4.140	6.200	5.590	10.600	13.800	10.800	12.600	14.400	14.000	11.700
11	8.040	5.510	3.880	6.120	6.300	11.000	13.200	12.000	13.000	14.800	13.900	11.100
12	6.650	5.460	3.950	6.080	6.170	11.100	13.000	12.300	13.000	14.300	14.400	11.600
13	7.090	5.350	3.690	7.460	6.010	11.000	13.700	11.100	13.300	14.000	14.400	10.900
14	6.920	5.680	3.020	5.550	6.390	11.200	13.800	11.600	12.500	14.100	15.000	11.100
15	7.160	5.790	2.580	7.170	6.280	11.200	13.600	11.900	12.100	13.400	14.500	11.100
16	7.340	5.290	2.430	8.260	6.690	11.800	14.000	11.100	12.400	15.000	14.200	11.400
17	6.930	5.570	2.580	7.730	6.950	12.600	13.500	10.100	12.700	15.300	14.200	12.000
18	7.330	5.900	2.580	7.730	6.920	12.200	12.600	10.100	13.100	14.900	13.300	11.800
19	5.970	6.230	2.270	7.220	7.770	12.100	11.800	10.300	13.400	13.800	13.000	11.500
20	5.070	6.060	2.190	6.680	7.930	10.500	11.600	10.500	13.600	14.800	13.100	11.000
21	5.170	5.510	2.120	6.200	8.930	9.990	11.200	10.800	13.100	15.000	12.400	11.200
22	5.170	5.290	2.040	5.550	9.190	10.600	11.500	11.500	15.000	14.400	12.500	11.200
23	5.000	4.940	2.190	4.900	9.650	12.000	12.000	11.300	14.000	14.800	12.300	11.400
24	4.700	6.170	2.350	4.550	9.450	12.100	11.800	11.300	14.500	14.900	13.400	11.300
25	4.140	4.510	2.430	3.100	9.650	12.100	11.300	12.200	14.500	14.600	12.800	10.500
26	4.640	5.290	3.020	5.700	9.500	12.000	10.500	11.600	14.900	14.500	12.200	9.840
27	6.430	5.230	2.950	3.050	9.700	13.300	12.100	11.900	14.600	14.600	11.500	9.510
28	6.530	4.820	2.810	3.140	9.700	13.800	11.600	11.700	13.400	15.000	12.000	8.050
29	6.430	5.230	3.820	3.050		13.100	11.600	12.100	13.300	14.600	11.100	8.520
30	5.290	4.390	4.510	3.080		13.200	11.200	11.800	13.400	14.300	10.500	9.310
31	5.350		4.390	3.500		13.200		11.300		14.500	11.200	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEVADA

MAJOR BASIN COLORADO RIVER

MINOR BASIN LOWER COLORADO RIVER

STATION LOCATION COLORADO RIVER NEAR

BOULDER CITY, NEVADA 5

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	3	61	10	16	0	2	10	5	10	5	11	17	42	21	53	27						
10	10	61	10	30	0	2	2	4	2	4	6	18	33	23	39	29						
10	17	61	10	31	0	2	7	5	7	5	6	16	40	21	46	26						
10	24	61	11	6	0	2	11	5	11	5	1	22	5	25	6	33						
10	31	61	11	13	0	2	1	4	1	4	13	16	20	21	33	26						
11	7	61	11	17	1	1	12	6	13	6	12	6	8	21	20	22						
11	14	61	11	29	0	1	7	5	7	5	5	8	15	13	20	15						
11	21	61	12	5	0	1	9	5	9	5	3	8	18	12	21	14						
11	28	61	12	7	0	1	8	5	8	5	7	8	13	12	20	14						
12	5	61	12	14	0	1	8	4	8	4	1	8	20	13	21	15						
12	12	61	1	10	0	1	3	2	3	2	11	8	14	12	25	14						
12	19	61	1	2	0	1	12	5	12	5	4	8	30	13	34	15						
12	26	61	1	10	1	2	7	4	8	4	3	16	22	20	25	26						
1	2	62	1	12	0	2	6	5	6	5	2	16	5	19	7	25						
1	9	62	1	19	0	2	6	5	6	5	0	16	18	20	18	26						
1	16	62	1	29	1	2	11	5	12	5	6	16	40	22	46	27						
1	23	62	2	6	0	2	5	5	5	5	10	16	18	21	28	26						
1	30	62	2	14	0	2	8	5	8	5	25	16	33	20	58	26						
2	6	62	2	16	0	1	11	5	11	5	0	7	17	12	17	14						
2	13	62	3	1	0	3	8	7	8	8	8	19	28	25	36	31						
2	20	62	3	7	1	2	3	4	4	4	6	16	31	20	37	26						
2	27	62	3	12	0	2	11	6	11	7	6	16	25	21	31	26						
3	6	62	3	19	0	2	6	5	6	5	7	15	46	21	53	26						
3	20	62	4	3	1	2	7	4	8	4	12	15	16	19	28	24						
3	27	62	4	16	1	2	9	5	10	5	0	15	33	20	33	25						
4	3	62	4	17	0	2	9	5	9	5	0	20	1	20	1	28						
4	10	62	4	25	0	1	4	5	4	5	5	16	24	21	29	26						
4	17	62	4	30	0	2	8	5	8	5	9	16	30	21	39	26						
4	24	62	5	29	0	2	4	4	4	4	17	20	46	26	63	33						
5	1	62	7	26	0	2	1	5	1	5	3	21	33	30	36	37						
5	8	62	6	12	0	2	6	5	6	5	7	25	11	34	18	42						
5	15	62	6	25	0	2	6	6	6	6	6	26	49	34	55	43						
5	22	62	6	27	0	1	7	5	7	5	14	17	44	23	58	29						
5	27	62	7	3	0	2	9	5	9	5	18	20	49	26	67	33						
6	4	62	7	6	0	2	6	6	6	6	0	50	20	28	20	57						
6	12	62	7	19	0	2	9	6	9	6	7	20	16	28	23	34						
6	26	62	7	24	0	1	6	4	6	4	10	21	28	27	38	34						
7	3	62	10	14	0	2	7	5	7	5	3	22	24	28	27	36						
7	8	62	8	7	0	2	3	4	3	4	0	53	38	28	38	60						
7	17	62	8	3	0	1	8	5	8	5	14	18	20	23	34	29						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEVADA
MAJOR BASIN COLORADO PIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER NEAR
BOULDER CITY, NEVADA 5

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												DATE OF DETERMINATION		RADIOACTIVITY IN PLANKTON			
					ALPHA						BETA								GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	24	62	9	12	0	2	12	6	12	6	0	25	19	31	19	36						
7	31	62	9	19	0	1	1	5	1	5	28	26	40	35	68	44						
8	7	62	8	29	0	3	7	6	7	7	12	20	14	26	26	33						
8	14	62	8	31	0	2	4	5	4	5	11	21	26	27	37	34						
8	21	62	9	12	0	2	4	5	4	5	44	26	70	34	114	43						
9	4	62	9	19	0	1	10	5	10	5	12	19	30	27	42	33						
9	25	62	10	23	0	1	6	4	6	4	2	20	27	27	29	34						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEVADA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER NEAR
BOULDER CITY, NEVADA 5

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	100	0	0	20	0	0	0	40	40	0	20																				
10	16	61	00	0	0	0	0	20	0	0	20	0	0																				
11	2	61	00	0	0	0	0	0	0	0	0	0	0																				
11	20	61	00	0	0	0	0	0	0	0	0	0	0																				
12	4	61	100	0	0	0	0	0	0	40	20	0	20																				
12	18	61	200	0	0	0	0	0	0	0	200	0	20																				
1	2	62	500	0	0	0	0	0	0	20	450	50	860	92	1	76	1																
1	15	62	200	50	0	0	0	20	20	50	90	0	90																				
2	5	62	1100	20	20	50	0	250	0	380	360	0	20	92	1	51	1	71	1														
2	19	62	200	0	0	40	0	0	0	120	80	0	20																				
3	5	62	300	0	0	40	0	20	0	120	80	20	80																				
3	19	62	100	0	0	0	0	0	0	0	90	0	20																				
4	2	62	300	0	0	20	0	20	20	100	170	0	40	92	1																		
4	16	62	300	60	0	0	0	0	0	150	40	0	20																				
5	7	62	500	460	0	0	0	0	0	20	0	0	0																				
5	21	62	100	0	0	20	0	0	0	50	20	0	0																				
6	4	62	00	0	0	0	20	0	0	0	20	0	0																				
6	18	62	200	0	0	0	0	80	0	40	40	0	0																				
7	2	62	100	0	0	60	0	20	0	20	20	0	0																				
7	16	62	100	20	0	20	0	0	0	20	20	0	20																				
8	6	62	200	0	0	60	0	40	0	0	80	0	0																				
8	20	62	400	0	0	0	0	40	0	120	210	0	0																				
9	4	62	200	0	0	40	0	0	0	0	120	0	80																				
9	24	62	00	0	0	0	0	0	0	0	0	0	10																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEVADA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER NEAR
BOULDER CITY, NEVADA 005

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61										40	0	1											1							0	0
10	16	61										0	0	0											0							3	0
11	2	61										0	0	0											0							0	0
11	20	61										0	0	1											0							0	0
12	4	61										0	0	0											1							1	0
12	18	61										90	0	0											1							0	0
1	2	62										0	0	0											1							0	0
1	15	62										0	0	1											1							0	0
2	5	62	89	36	80	28	26	17	8	5	14	110	0	0											0							0	0
2	19	62	89	55	26	20	47	16	9	3	6	0	0	0											0							0	0
3	5	62										60	10	1											1							0	0
3	19	62	82	15	91	10	89	8	80	5	62	0	0	1											0							0	0
4	2	62	89	90								0	0	0											0							0	0
4	16	62	89	90	82	5					5	40	0	0											4							0	0
5	7	62										0	0	0											1							0	0
5	21	62										0	0	0											1							0	0
6	4	62										0	0	0											1							0	0
6	18	62										0	0	0											0							0	0
7	2	62										0	0	5											0							0	0
7	16	62										20	0	0											1							0	0
8	6	62										0	0	0											0							0	0
8	20	62	8	60	91	9	26	5	80	4	22	0	0	0											0							0	0
9	4	62										0	0	6	2	1									0							0	0
9	24	62										0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE NEVADA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER NEAR
BOULDER CITY, NEVADA 5

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	2	61	11	24	5392	187	39	148	2	12	13	1	1	11	0	3	3	1	5
12	26	61	1	19	3845	212	37	175	-	-	-	-	-	-	-	-	-	-	-
2	12	62	3	8	4551	226	55	171	-	-	-	-	-	-	-	-	-	-	-
2	12	62		*	8396	220	47	173	2	13	10	1	0	9	0	5	4	1	12
3	27	62	4	10	5251	162	52	110	-	-	-	-	-	-	-	-	-	-	-
5	3	62	5	18	4718	205	65	140	-	-	-	-	-	-	-	-	-	-	-
6	11	62	6	23	5132	147	49	98	-	-	-	-	-	-	-	-	-	-	-
6	11	62		*	15101	171	55	116	1	15	13	1	1	9	2	5	6	1	14

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEVADA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATIONCOLORADO RIVER NEAR
BOULDER CITY, NEVADA 5

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS, mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	16.0	5.7	8.0	-	-	6.8	8.6	-	76	126	324	-	-	206	-	-	3
10	10	61	16.0	8.9	8.0	-	-	6.7	8.6	-	74	126	326	-	-	212	-	-	33
10	17	61	16.0	5.7	8.0	-	-	6.7	8.5	-	76	124	322	-	-	212	-	-	33
10	24	61	16.0	5.6	8.0	-	-	6.7	8.5	-	76	128	326	-	-	216	-	-	3
10	31	61	16.0	6.1	8.0	-	-	6.6	8.5	-	76	124	324	-	-	212	-	-	*3
11	2	61	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-
11	7	61	15.5	10.4	7.9	-	-	6.8	8.7	.0	76	126	318	0	0	219	.0	666	*3
11	14	61	15.0	5.2	8.0	-	-	6.9	8.3	-	78	126	326	5	25	213	.1	464	*30
11	21	61	14.0	8.9	8.0	-	-	6.9	8.8	-	76	124	324	0	0	218	-	574	13
11	28	61	14.0	9.8	8.0	-	-	6.9	8.8	-	76	124	324	-	-	207	.0	655	*3
12	5	61	14.0	8.4	8.0	-	-	6.9	8.8	-	78	120	324	5	-	218	.0	678	39
12	12	61	12.5	8.5	8.0	-	-	6.9	8.8	-	78	122	332	-	-	217	-	-	*3
12	19	61	13.0	7.0	7.9	-	-	6.8	8.8	-	78	124	322	-	-	219	-	-	3
12	26	61	13.0	6.8	7.9	-	14	6.9	8.8	-	76	124	328	-	-	229	-	-	7
1	2	62	13.5	5.6	7.9	-	-	6.8	8.9	-	80	112	324	-	-	230	-	600	10
1	9	62	13.5	5.6	7.9	-	-	6.8	8.9	-	78	122	338	-	-	233	.0	670	*3
1	16	62	13.0	10.0	8.0	-	-	6.8	8.8	-	80	126	326	-	-	219	-	-	7
1	23	62	11.5	8.6	7.9	-	-	6.8	8.8	-	84	132	340	-	0	218	.0	668	3
1	30	62	13.0	8.6	8.0	-	-	6.8	8.8	-	80	132	328	5	*25	217	.0	656	3
2	2	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	.1	610	-
2	6	62	13.0	13.2	8.0	-	-	6.7	8.7	-	84	130	328	5	-	228	.0	676	20
2	12	62	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
2	13	62	13.0	14.7	8.1	-	-	6.6	8.7	-	84	136	336	0	-	225	.0	732	*3
2	20	62	13.0	16.5	8.0	-	-	6.6	8.5	-	84	134	342	-	-	232	-	-	67
2	27	62	12.5	16.4	8.1	-	-	6.4	8.4	-	86	134	346	5	-	229	.1	749	*3
3	6	62	13.0	20.9	8.1	-	-	6.4	8.3	.0	84	134	346	5	*25	226	.1	732	*3
3	20	62	12.5	22.0	8.1	-	-	6.2	8.2	-	84	132	340	5	-	236	.0	699	*3
3	27	62	13.0	27.2	8.1	-	4	6.0	8.0	-	76	134	342	5	-	241	.0	647	*3
4	3	62	13.5	20.8	8.1	-	-	5.7	7.7	-	84	128	342	5	-	240	.0	748	*3
4	10	62	14.0	-	8.1	-	-	5.4	8.9	-	84	128	336	-	-	249	-	-	*3
4	17	62	14.5	9.1	8.1	-	-	8.7	10.8	-	86	132	338	10	-	252	.0	-	*3
4	24	62	14.5	9.1	8.0	-	-	6.9	10.7	-	84	134	344	5	-	242	-	766	*3
5	1	62	14.0	9.0	8.0	-	-	7.0	8.9	-	82	130	338	5	-	230	.0	709	*3
5	3	62	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-
5	8	62	15.0	9.2	8.0	-	-	7.0	9.0	-	84	130	346	-	-	225	-	-	*3
5	15	62	14.5	9.0	8.0	-	-	7.0	9.0	-	86	130	344	-	-	226	-	-	*3
5	22	62	14.5	9.0	8.0	-	-	7.0	9.0	-	86	130	346	-	-	225	-	-	*33
5	29	62	14.5	9.2	8.0	-	-	9.0	10.8	-	86	128	348	-	-	222	-	-	1000
6	4	62	-	-	-	-	-	-	-	-	-	-	-	15	-	-	.0	666	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	NEVADA
MAJOR BASIN	COLORADO RIVER
MINOR BASIN	LOWER COLORADO RIVER
STATION LOCATION	COLORADO RIVER NEAR BOULDER CITY, NEVADA

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DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	5	62	15.0	8.9	8.0	-	-	9.0	11.0	-	86	130	352	-	-	231	-	-	8000
6	11	62	-	-	-	-	60	-	-	-	-	-	-	-	-	-	-	-	-
6	12	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	.0	720	-
6	19	62	15.0	9.0	7.9	-	-	10.8	13.0	-	82	128	344	-	-	235	-	-	790
6	26	62	14.0	9.1	8.1	-	-	9.0	13.0	-	84	130	342	-	-	232	-	-	*3
7	3	62	14.0	8.9	8.0	-	-	9.0	11.0	-	84	130	344	10	-	232	.0	718	*3
7	10	62	13.5	9.0	8.0	-	-	9.0	13.0	-	86	130	320	5	25	229	.0	710	*3
7	17	62	13.5	8.9	8.0	-	-	8.9	12.9	-	84	128	336	5	25	234	.0	708	*3
7	24	62	14.0	9.1	8.0	-	-	9.0	-	-	86	130	330	5	25	232	.0	735	*3
7	31	62	14.0	8.8	8.1	-	-	12.7	14.7	-	84	134	332	5	*25	277	.0	730	*30
8	7	62	14.0	9.0	8.0	-	-	10.8	14.8	-	82	132	338	5	25	214	.0	679	5
8	14	62	14.0	8.9	8.1	-	-	10.9	14.8	-	84	134	340	5	25	204	.0	720	3
8	21	62	13.5	9.2	8.0	-	-	10.8	14.8	-	84	130	340	0	-	182	.0	694	30
9	4	62	14.0	9.3	8.1	-	-	10.8	13.0	.0	84	130	334	5	25	210	.0	705	*3
9	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
9	25	62	14.0	9.8	8.1	-	-	10.9	12.9	-	82	128	338	-	-	222	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Hoover Dam
Data furnished by U.S. Bureau of Reclamation
through U.S. Geological Survey

STATE	Nevada
MAJOR BASIN	Colorado River
MINOR BASIN	Lower Colorado River
STATION LOCATION	Colorado River near Boulder City, Nevada

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	6.040	8.120	8.180	3.900	8.430	13.300	11.200	17.500	16.900	8.790	14.800	12.000
2	10.600	7.940	7.350	6.360	7.620	12.200	16.000	16.900	11.600	14.200	16.000	7.800
3	10.900	7.700	4.680	7.070	5.880	9.360	17.800	16.500	6.620	13.000	15.800	7.880
4	11.200	7.260	7.040	6.540	4.460	8.590	18.000	16.200	13.000	5.610	12.400	16.100
5	10.900	4.900	8.540	6.510	10.600	11.900	17.600	13.900	14.100	12.700	9.700	15.100
6	10.500	8.670	9.500	6.480	11.300	12.500	18.100	8.660	14.800	12.200	16.300	14.500
7	8.780	9.250	11.200	5.000	13.100	13.000	12.600	15.500	15.300	11.500	16.800	14.700
8	5.660	9.950	10.900	7.710	13.300	13.400	12.000	14.500	15.000	7.130	16.100	11.400
9	9.340	9.150	10.100	7.730	10.400	16.600	17.600	14.400	11.300	13.700	16.800	6.800
10	10.400	9.230	5.610	9.660	7.200	10.800	16.100	14.000	8.510	14.300	14.800	13.500
11	9.330	6.760	10.700	12.100	3.210	9.670	16.200	13.800	15.400	13.800	13.100	13.900
12	10.500	4.840	11.200	11.800	6.140	14.100	17.800	9.590	15.200	13.400	9.820	14.500
13	12.500	10.700	10.100	6.890	7.060	15.200	18.000	5.720	14.600	13.200	16.000	13.700
14	11.500	10.500	10.900	5.890	8.980	15.200	13.300	15.700	14.100	11.300	15.600	13.600
15	6.770	10.700	8.140	10.600	10.800	15.000	8.320	15.300	13.800	8.140	15.100	9.650
16	13.300	11.500	5.880	9.470	9.570	13.400	16.200	15.500	9.800	15.200	15.100	6.000
17	8.460	10.700	3.940	9.090	6.910	10.500	17.700	15.900	7.500	16.200	14.200	13.400
18	8.180	9.370	9.830	8.420	6.430	8.380	17.400	17.200	14.700	15.800	10.200	12.600
19	8.480	6.340	9.240	8.860	11.800	12.800	16.100	11.800	14.200	17.400	6.400	14.200
20	6.780	13.000	8.930	6.190	10.700	14.500	14.700	7.200	15.800	16.500	14.300	13.400
21	6.210	10.400	8.800	4.510	10.200	14.900	11.400	17.300	15.300	12.200	14.600	13.800
22	3.500	10.400	7.340	11.300	7.520	15.400	7.050	18.100	14.500	9.660	14.900	10.100
23	7.050	5.080	5.850	8.850	9.950	15.100	18.300	16.400	11.300	16.700	15.000	5.360
24	8.270	8.980	3.970	8.550	7.590	8.910	18.000	17.600	8.180	16.000	14.400	15.400
25	9.970	8.900	4.070	8.320	6.880	8.080	17.300	18.300	15.200	16.500	11.400	15.200
26	9.620	5.070	8.420	8.830	11.600	14.500	17.000	14.700	15.100	16.100	6.900	13.700
27	9.320	9.830	8.380	6.470	11.600	15.400	17.000	7.340	15.500	16.600	15.800	13.700
28	6.630	8.050	8.280	3.910	11.400	17.100	13.000	17.100	16.400	13.200	15.400	13.100
29	3.720	8.790	7.430	8.520		15.600	6.280	18.300	15.800	9.960	15.100	10.000
30	9.100	8.450	7.010	8.600		15.100	16.600	8.040	13.400	16.600	15.200	5.810
31	8.360		3.720	8.680		12.000		18.200		17.900	14.100	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ARIZONA

MAJOR BASIN COLORADO RIVER

MINOR BASIN MIDDLE COLORADO RIVER

STATION LOCATION COLORADO RIVER AT
PAGE, ARIZONA 60

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	00	0	0	0	0	0	0	0	0	0	0																				
10	22	61	00	0	0	0	0	0	0	0	20	0	220																				
11	6	61	200	0	0	0	0	0	0	0	250	0	0																				
11	20	61	1000	0	0	20	0	40	0	20	890	0	80	87	2	85	1																
12	2	61	600	0	0	0	0	40	0	0	560	0	210	92	1	82	1																
1	2	62	100	0	0	0	0	0	0	0	110	20	220																				
1	14	62	100	0	0	0	0	0	0	0	150	0	0																				
1	22	62	300	0	0	0	0	0	0	0	340	0	70																				
2	5	62	100	0	0	0	0	0	0	0	130	20	470																				
2	19	62	00	0	0	0	0	0	0	0	0	0	0																				
3	5	62	400	0	0	0	0	20	0	0	380	0	130																				
3	19	62	1100	0	0	0	0	0	0	20	1040	0	80	82	1																		
4	2	62	00	0	0	0	0	0	0	0	0	0	0																				
4	16	62	00	0	0	0	0	0	0	0	0	0	0																				
5	7	62	400	0	0	0	0	0	0	130	300	110	800																				
5	21	62	700	0	0	0	0	0	0	20	720	0	720																				
6	4	62	1700	0	0	60	0	210	0	170	1300	0	150	92	2	57	1																
6	18	62	1400	0	0	20	0	230	0	40	1080	20	100	92	2	57	1																
7	2	62	900	0	0	0	0	270	0	80	540	0	60	57	1	92	1																
7	16	62	1000	0	0	180	0	20	0	290	520	70	590	68	1																		
8	6	62	1200	0	0	150	0	0	0	310	790	170	170	69	1																		
9	4	62	14200	40	0	890	0	210	0	4350	8690	1350	1180	68	5	92	4	71	3	88	2	82	2	25	1	38	1	51	1	79	1		
9	17	62	32600	0	840	570	0	0	0	3170	28060	1270	1690	92	7	88	5	68	5	87	4	82	4	17	3	89	3	81	3	38	2		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ARIZONA
MAJOR BASIN COLORADO RIVER
MINOR BASIN MIDDLE COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
PAGE, ARIZONA 060

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61										0	0	0											0							0	0
10	22	61										0	0	0											0							0	0
11	6	61										0	0	0											0							0	0
11	20	61										20	0	0											0							0	0
12	2	61	92	50	36	31	71	3	72	2	14	0	0	0											0							0	0
1	2	62										0	0	0											0							0	0
1	14	62	92	51	36	18	71	3	65	3	25	0	0	0											0							0	0
1	22	62										110	0	0											0							0	0
2	5	62										0	0	0											0							0	0
2	19	62										0	0	0											0							0	0
3	5	62										0	0	0											0							0	0
3	19	62	36	25	92	8	65	6	51	5	56	0	0	0											0							0	0
4	2	62										0	0	0											0							0	0
4	16	62										0	0	-											-							-	-
5	7	62	92	22	65	13	41	10	51	8	47	0	0	0											0							0	0
5	21	62	65	18	92	8	36	7	41	7	60	0	0	0											0							0	0
6	4	62	92	36	36	9	71	7	65	6	42	0	0	0											0							0	0
6	18	62	92	37	36	12	65	7	51	3	41	0	0	0											0							0	0
7	2	62	92	27	36	8	71	6	41	3	56	20	0	0											1							0	1
7	16	62	92	22	36	14	46	9	55	3	52	0	0	-											-							-	-
8	6	62	92	20	40	12	26	8	78	7	53	0	0	-											-							-	-
9	4	62	92	18	26	17	30	8	36	7	50	-	-	-											-							-	-
9	17	62	91	35	26	31	92	8	36	3	23	0	0	0											0							-	-

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE ARIZONA
MAJOR BASIN COLORADO RIVER
MINOR BASIN MIDDLE COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
PAGE, ARIZONA 60

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	12	157	83	3	6	160	83	912	118	48	42	960	125						
10	9	61	11	14	47	30	8	5	55	6	191	49	37	27	228	56						
10	15	61	10	26	22	18	5	5	27	19	92	34	32	21	124	40						
10	22	61	11	2	24	11	7	4	31	12	64	28	27	21	91	35						
10	30	61	11	20	47	20	12	5	59	21	152	45	37	26	189	52						
1	2	62	1	18	16	7	13	7	29	10	35	27	34	25	69	37						
1	8	62	1	19	8	7	12	7	20	10	62	28	29	25	91	38						
1	22	62	2	7	17	9	15	7	32	11	65	25	53	21	118	33						
1	27	62	2	12	8	5	11	7	19	9	38	20	43	22	81	30						
2	5	62	2	19	21	9	8	5	29	10	68	24	54	22	122	33						
2	12	62	2	26	76	28	16	11	92	30	192	35	46	20	238	40						
2	19	62	3	6	143	87	7	4	150	87	873	116	67	13	940	117						
2	26	62	3	15	74	38	2	4	76	38	363	44	64	20	427	48						
3	5	62	3	19	30	18	8	5	38	19	218	47	50	28	268	53						
3	12	62	3	23	22	15	7	6	29	16	100	24	31	26	131	35						
3	19	62	4	4	47	22	4	3	51	22	223	36	49	17	272	40						
3	26	62	4	9	48	24	19	8	67	25	177	35	51	22	228	41						
4	2	62	4	13	285	137	2	4	287	137	1243	223	77	22	1320	224						
4	9	62	4	26	107	53	11	5	118	53	406	87	52	12	458	88						
4	16	62	5	22	36	26	2	3	38	27	135	70	42	18	177	72						
4	23	62	5	28	39	27	0	1	39	27	193	55	0	20	193	59						
5	7	62	6	14	1	1	2	2	3	2	9	6	22	8	31	10						
5	14	62	6	22	11	5	2	1	13	5	42	7	17	4	59	8						
5	21	62	6	26	51	19	3	2	54	19	251	19	55	9	306	21						
5	28	62	6	29	33	39	5	2	38	39	86	28	23	17	109	33						
6	4	62	7	6	13	10	3	3	16	10	93	34	18	11	111	36						
6	11	62	7	12	11	6	3	3	14	7	20	18	11	15	31	23						
6	18	62	7	17	5	5	3	2	8	5	38	24	17	7	55	25						
6	25	62	7	25	7	4	3	2	10	4	41	10	15	8	56	13						
7	23	62	8	20	31	14	4	2	35	14	158	14	41	7	199	16						
7	30	62	8	21	28	12	5	5	33	13	94	21	48	16	142	26						
8	6	62	8	27	33	26	6	4	39	26	108	45	20	8	128	46						
8	13	62	8	30	53	41	5	4	58	41	304	108	32	26	336	110						
8	27	62	10	4	-	-	-	-	-	-	109	47	65	31	174	56						
9	4	62	9	20	16	12	7	6	23	13	50	50	23	37	73	62						
9	10	62	9	28	18	14	12	7	30	16	62	89	45	36	107	96						
9	17	62	10	10	31	17	11	8	42	19	88	49	65	39	153	63						
9	24	62	10	18	11	108	12	9	23	108	1101	448	39	37	1140	450						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE ARIZONA

MAJOR BASIN COLORADO RIVER

MINOR BASIN MIDDLE COLORADO RIVER

STATION LOCATION COLORADO RIVER AT
PAGE, ARIZONA

60

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
12	7	61	12	14	4300#	77	20	57	0	5	8	1	1	6	0	2	1	1	3
9	4	62	9	18	5290	194	109	85	-	-	-	-	-	-	-	-	-	-	-

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ARIZONA
MAJOR BASIN COLORADO RIVER
MINOR BASIN MIDDLE COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
PAGE, ARIZONA 60

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	15.2	-	8.1	-	-	-	-	-	42	128	352	-	8000	-	-	1416	-
10	9	61	15.0	-	8.3	-	-	-	-	-	50	216	252	0	1600	-	-	1249	-
10	15	61	14.4	-	8.0	-	-	-	-	-	48	150	386	15	3900	-	.1	897	-
10	22	61	13.0	-	8.1	-	-	-	-	-	51	144	348	10	1100	-	.1	846	100
10	30	61	9.6	-	7.8	-	-	-	-	-	53	160	364	8	1100	312	.2	814	*100
11	6	61	7.3	-	8.2	-	-	-	-	-	62	250	410	10	2500	-	-	958	2100
11	13	61	7.3	10.6	8.1	-	-	-	-	-	55	164	400	10	470	-	-	925	700
11	20	61	6.5	10.8	8.1	-	-	-	-	-	60	160	384	10	450	-	-	763	*100
11	27	61	6.1	12.0	8.2	-	-	-	-	-	61	180	380	8	550	-	-	877	*100
12	4	61	6.2	11.5	8.3	-	-	-	-	.0	76	160	320	25	450	-	-	956	-
12	11	61	1.5	12.5	8.3	-	-	-	-	-	68	174	400	-	180	-	-	973	100
12	18	61	.3	-	8.2	-	-	-	-	.0	98	170	435	20	220	-	-	1834	100
1	2	62	.3	13.5	8.2	-	-	-	-	.0	86	180	468	-	230	-	.0	717	*100
1	8	62	6.3	13.5	8.2	-	-	-	-	-	92	190	440	10	235	-	-	1092	*100
1	15	62	1.0	12.6	8.2	-	-	-	-	-	89	160	392	8	260	420	-	733	500
1	22	62	2.6	12.0	8.2	-	-	-	-	.0	85	160	416	10	150	293	.0	1034	*100
1	28	62	2.9	8.6	8.4	-	-	-	-	-	100	180	408	10	150	-	.0	960	*100
2	5	62	2.6	-	8.5	-	-	-	-	-	95	172	384	5	170	-	.0	547	-
2	12	62	9.0	9.5	8.1	-	-	-	-	-	63	142	368	5	450	-	-	613	*100
2	19	62	6.0	8.3	8.1	-	-	-	-	.0	32	-	-	5	11000	220	.0	578	-
2	26	62	4.5	11.3	8.0	-	-	-	-	.0	53	-	360	5	3125	238	.3	865	600
3	5	62	5.0	11.4	8.0	-	-	-	-	-	-	182	370	10	1100	-	-	1062	720
3	12	62	5.0	12.0	8.1	-	-	-	-	-	135	176	384	0	800	420	-	847	100
3	19	62	11.0	11.2	8.0	-	-	-	-	.0	18	122	227	8	1300	200	-	530	200
3	26	62	15.0	10.5	8.2	-	-	-	-	.0	83	180	354	19	1300	250	-	690	2100
4	2	62	12.0	12.0	7.8	-	-	-	-	.0	53	158	328	15	4500	-	-	689	-
4	9	62	12.6	9.4	8.1	-	-	-	-	.0	45	148	268	35	4000	260	7.6	632	9000
4	16	62	15.0	9.9	7.8	-	-	-	-	.2	39	156	240	19	3000	97	.0	512	-
4	23	62	16.0	9.0	7.8	-	-	-	-	.6	26	141	204	8	3500	100	.0	490	300
4	30	62	14.9	10.1	7.9	-	-	-	-	.0	21	142	184	0	3000	-	.0	595	130
5	7	62	16.5	10.5	8.3	-	-	-	-	.3	20	172	192	22	1500	105	-	397	*500
5	14	62	15.5	10.3	8.3	-	-	-	-	.7	19	144	168	15	1500	105	-	405	2400
5	21	62	15.0	9.8	8.2	-	-	-	-	.3	24	158	172	12	950	95	2.6	420	300
5	28	62	19.0	8.0	7.4	-	-	-	-	.4	-	120	220	15	650	86	-	592	-
6	4	62	19.0	7.5	7.7	-	-	-	-	.6	6	155	178	0	540	83	-	596	*130
6	11	62	22.0	8.0	7.1	-	-	-	-	.8	23	108	190	14	300	88	-	499	-
6	18	62	19.0	9.5	7.8	-	-	-	-	.4	15	104	180	21	400	-	.0	482	*130
6	25	62	20.0	8.4	8.0	-	-	-	-	.2	19	92	180	22	320	46	.0	-	*130
7	2	62	25.0	8.6	8.1	-	-	-	-	.3	20	132	148	20	500	-	.0	442	*100

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ARIZONA
MAJOR BASIN COLORADO RIVER
MINOR BASIN MIDDLE COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
PAGE, ARIZONA

60

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	9	62	24.0	8.0	8.1	-	-	-	-	.5	26	160	202	22	2000	51	.0	473	*100
7	16	62	23.0	7.8	8.1	-	-	-	-	.4	32	146	276	20	2000	64	.0	-	120
7	23	62	21.0	8.0	8.3	-	-	-	-	-	45	142	264	-	320	150	.0	513	-
7	30	62	25.9	8.1	8.2	-	-	-	-	-	40	168	284	-	750	-	-	543	-
8	5	62	25.0	-	8.0	-	-	-	-	-	55	236	328	-	1000	-	-	623	-
8	13	62	26.0	9.5	8.3	-	-	-	-	.2	70	180	348	8	800	245	.0	841	*130
8	20	62	27.0	10.2	8.1	-	-	-	-	.2	50	190	330	0	750	410	.0	776	-
8	27	62	26.0	9.2	7.8	-	-	-	-	.0	90	184	380	0	650	-	.0	791	130
9	4	62	24.0	9.3	8.4	-	-	-	-	.0	106	158	458	5	310	-	-	791	300
9	10	62	21.0	7.5	8.4	-	-	-	-	.9	84	236	496	0	400	460	.0	1228	-
9	17	62	24.5	7.0	8.4	-	-	-	-	.4	100	160	520	0	300	280	.0	960	-
9	24	62	23.0	5.9	7.7	-	-	-	-	.3	85	224	540	8	5000	360	.0	1052	400

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Lees Ferry, Arizona
Operated by U.S. Geological Survey

STATE	Arizona
MAJOR BASIN	Colorado River
MINOR BASIN	Middle Colorado River
STATION LOCATION	Colorado River at Page, Arizona

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	11.600	13.200	7.690	6.000	5.610	9.760	33.500	65.200	39.700	50.200	12.000	4.800
2	11.300	11.800	7.860	5.790	5.790	9.300	37.000	67.400	38.400	49.600	11.600	4.580
3	11.100	11.100	8.000	5.610	5.910	8.650	32.300	66.300	36.600	49.100	10.700	4.450
4	11.100	10.100	8.040	5.530	6.000	7.970	28.000	61.900	36.100	49.600	10.100	4.300
5	11.300	9.800	8.140	5.530	6.280	6.900	26.500	57.500	37.400	48.600	9.950	4.180
6	11.100	9.910	8.140	5.670	6.480	6.130	25.100	50.200	39.200	46.500	9.800	4.060
7	10.300	9.640	8.000	5.530	6.840	6.190	25.800	48.600	41.600	44.000	9.570	3.990
8	9.800	9.450	7.900	5.360	7.110	6.380	28.000	51.200	44.000	41.600	9.340	3.940
9	10.100	8.970	7.830	5.500	7.480	6.670	29.600	53.300	46.500	38.400	9.160	3.880
10	12.200	8.790	7.800	5.730	8.500	6.900	28.800	57.500	49.100	35.600	9.120	3.880
11	18.700	8.570	7.410	6.320	10.100	7.660	28.400	63.000	49.600	32.700	8.610	3.880
12	18.100	8.390	7.040	5.410	12.000	8.900	27.300	69.600	48.600	30.700	8.540	3.810
13	18.700	8.360	6.740	4.950	13.400	10.200	26.500	74.000	49.100	28.400	7.940	3.720
14	17.200	8.470	5.790	4.960	14.200	11.600	25.400	79.200	49.600	26.500	7.410	3.790
15	14.400	8.540	4.620	4.930	16.300	11.100	24.300	82.400	51.200	24.700	7.000	3.940
16	12.700	8.470	4.230	5.010	27.300	10.100	24.000	84.400	53.300	22.900	6.700	4.040
17	11.800	8.290	3.850	4.850	31.900	9.120	26.200	83.400	55.400	21.900	6.570	4.130
18	11.100	8.320	3.590	4.500	32.700	8.470	31.900	80.200	56.400	21.200	6.380	4.080
19	10.900	8.180	3.400	4.380	29.900	8.220	38.800	74.000	55.400	19.600	6.130	4.040
20	10.900	7.970	3.340	4.550	26.500	8.110	43.500	66.300	53.300	18.400	5.940	4.230
21	10.700	8.000	4.800	4.930	23.600	8.080	48.000	59.700	49.600	17.500	5.730	7.110
22	10.900	8.290	5.700	5.850	19.300	8.140	51.000	52.200	47.000	16.600	5.610	7.660
23	10.900	8.470	6.000	6.030	16.300	8.790	56.400	46.000	48.000	16.300	5.440	7.240
24	10.300	8.320	5.850	6.000	14.200	10.000	58.600	44.000	51.200	16.100	5.330	6.000
25	10.100	8.140	5.820	6.320	12.700	11.800	59.700	41.100	52.200	15.800	5.200	5.410
26	9.830	7.830	5.820	6.640	11.300	14.400	59.700	37.900	53.300	14.400	5.100	7.070
27	9.720	7.660	5.820	6.670	10.700	13.400	59.700	37.000	53.300	13.700	5.140	7.080
28	9.530	7.480	5.820	6.440	10.300	12.200	61.900	37.000	52.200	13.200	5.030	7.970
29	9.300	7.520	5.730	6.130		11.600	63.000	37.900	51.200	12.500	5.030	10.300
30	9.340	7.620	5.670	5.880		12.700	64.100	38.800	51.200	12.500	5.030	9.950
31	10.500		5.730	5.730		22.200		40.200		12.700	4.980	

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Colorado-Utah State Line
Operated by U.S. Geological Survey

STATE	Colorado
MAJOR BASIN	Colorado River
MINOR BASIN	Upper Colorado River
STATION LOCATION	Colorado River at Loma, Colorado

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	6.140	4.630	3.490	3.110	3.100	2.640	4.600	24.200	15.600	25.600	5.000	2.230
2	6.610	4.740	3.530	2.860	3.200	2.740	4.540	20.700	17.000	25.000	4.880	2.290
3	5.740	4.740	3.650	2.620	3.300	3.340	5.040	19.000	18.500	23.200	4.630	2.240
4	5.240	4.650	3.530	2.570	3.300	3.430	6.520	18.800	20.000	21.500	4.600	2.290
5	5.280	4.160	3.490	2.920	3.400	3.320	6.880	20.700	21.300	20.600	4.540	2.290
6	5.090	4.160	3.350	3.080	3.500	3.300	6.850	24.000	22.400	18.900	4.470	2.290
7	5.140	3.830	2.880	3.240	4.110	3.510	6.970	27.300	23.300	17.700	4.200	2.280
8	5.090	3.690	3.020	3.350	4.090	3.710	6.880	30.300	23.200	16.500	3.890	2.350
9	6.550	3.810	3.130	3.370	4.920	3.630	6.120	32.400	21.500	16.000	3.770	2.520
10	6.000	4.110	3.060	3.100	5.310	3.650	5.280	34.600	20.500	14.500	3.470	2.560
11	5.970	4.180	2.920	2.400	6.200	3.690	5.450	36.300	21.600	13.400	3.410	2.640
12	5.640	4.110	2.460	2.200	6.790	3.610	6.020	37.000	24.200	12.600	3.410	2.640
13	5.400	4.110	2.160	1.700	7.780	3.300	6.670	39.200	26.200	11.800	3.320	2.660
14	5.240	4.110	1.960	1.750	6.320	3.240	7.720	38.700	28.400	11.000	3.260	2.660
15	5.240	3.830	2.230	2.500	4.430	3.590	10.200	33.100	29.400	10.700	3.100	2.590
16	5.160	3.530	2.950	2.700	4.140	3.690	13.700	27.800	28.000	9.940	2.780	2.570
17	4.900	3.770	3.350	2.800	4.540	3.710	16.900	23.900	25.000	9.300	2.510	2.540
18	4.900	3.950	3.690	2.700	4.070	3.810	19.100	21.200	21.000	8.380	2.620	2.540
19	5.000	4.030	3.260	2.800	3.550	3.490	20.800	19.100	19.100	8.110	2.740	2.490
20	4.920	3.910	3.410	3.000	3.630	3.320	23.100	17.500	20.800	7.750	2.760	2.410
21	4.810	3.730	3.490	3.100	3.340	3.450	26.300	17.800	24.000	7.360	2.850	2.710
22	4.690	3.730	3.530	3.300	3.350	3.730	26.800	18.400	25.700	6.850	2.920	3.990
23	4.630	3.810	3.510	3.200	3.320	3.510	23.800	17.100	26.000	6.460	2.800	3.870
24	4.540	3.750	3.100	3.000	3.320	3.430	22.800	15.300	24.600	6.200	2.780	3.810
25	4.430	3.830	2.950	2.900	3.300	3.370	24.600	15.200	24.300	6.070	2.660	3.650
26	4.470	3.770	2.880	2.800	3.350	3.430	27.100	16.000	23.600	6.700	2.560	3.510
27	4.390	3.790	3.200	2.700	3.350	3.670	28.600	16.500	23.100	6.760	2.460	3.510
28	4.280	3.830	2.990	2.850	2.900	4.520	26.800	19.300	23.600	6.520	2.360	4.030
29	4.430	3.550	2.920	2.950		5.360	26.100	18.800	23.600	6.100	2.320	4.030
30	4.450	3.510	3.170	3.000		5.040	28.000	17.300	24.100	5.500	2.320	3.830
31	4.220		3.130	3.000		4.900		15.800		5.040	2.220	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE COLORADO
MAJOR BASIN COLORADO RIVER
MINOR BASIN UPPER COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
LOMA, COLORADO

6

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO	DAY	μμc/g	±	μμc/g	±
10	16	61	10	30	0	2	3	4	3	4	35	18	21	21	56	28						
10	23	61	11	3	3	2	6	4	9	4	18	16	15	20	33	26						
10	30	61	11	13	0	2	1	4	1	4	31	16	76	22	107	27						
11	6	61	11	21	2	3	5	5	7	6	19	16	50	21	69	26						
11	20	61	12	1	2	3	9	6	11	7	12	17	44	22	56	28						
11	27	61	12	4	17	6	11	6	28	8	79	13	49	14	128	19						
12	11	61	12	21	3	3	11	8	14	9	33	18	36	24	69	30						
12	18	61	1	2	3	2	8	6	11	6	19	16	45	22	64	27						
1	9	62	1	22	0	3	4	5	4	6	32	18	24	21	56	28						
1	16	62	1	29	10	6	10	7	20	9	19	25	15	26	34	36						
1	26	62	2	6	1	1	5	5	6	5	8	8	36	13	44	15						
1	29	62	2	12	2	2	2	4	4	4	0	16	34	21	34	26						
2	6	62	2	19	3	3	10	6	13	6	59	18	44	20	103	27						
2	22	62	3	7	8	8	8	6	16	10	99	27	62	22	161	35						
2	26	62	3	14	2	3	0	4	2	5	96	19	38	21	134	28						
3	5	62	3	19	3	3	4	4	7	5	26	18	50	21	76	28						
3	12	62	3	27	0	3	5	4	5	5	39	17	12	18	51	25						
3	21	62	4	4	17	9	2	4	19	10	71	33	34	27	105	43						
3	26	62	4	10	13	6	4	4	17	7	83	23	52	21	135	31						
4	2	62	4	13	16	7	6	4	22	8	102	16	50	12	152	20						
4	9	62	4	23	4	2	6	3	10	4	70	10	52	11	122	15						
4	30	62	6	4	6	5	1	2	7	5	91	19	31	8	122	21						
5	7	62	6	13	5	5	1	2	6	5	56	12	20	8	76	14						
5	14	62	6	21	12	7	1	1	13	7	70	17	20	9	90	19						
5	21	62	6	26	2	1	4	2	6	2	24	8	25	9	49	12						
5	28	62	6	28	1	2	1	2	2	3	42	16	23	14	65	21						
6	4	62	7	7	4	2	1	2	5	3	15	4	14	4	29	6						
6	11	62	7	12	1	1	2	2	3	2	15	7	23	9	38	11						
6	18	62	7	18	1	1	2	2	3	2	9	6	20	8	29	10						
6	25	62	7	25	1	1	1	1	2	1	18	8	15	8	33	11						
7	2	62	8	10	2	2	1	2	3	3	25	5	20	4	45	6						
7	11	62	8	6	2	2	2	2	4	3	16	13	27	14	43	19						
7	16	62	8	20	1	1	6	3	7	3	16	6	30	7	46	9						
7	23	62	8	21	1	1	1	3	2	3	3	10	53	17	56	20						
7	30	62	8	28	3	3	6	4	9	5	9	21	31	26	40	33						
8	6	62	8	27	6	4	3	5	9	6	5	11	14	14	19	18						
8	20	62	9	6	0	3	10	10	10	10	26	28	48	38	74	47						
8	28	62	9	13	0	2	12	8	12	8	20	30	24	44	44	53						
9	4	62	9	24	0	2	11	10	11	12	6	23	27	37	33	44						
9	11	62	9	27	1	2	13	9	14	9	26	33	86	50	112	60						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE COLORADO
MAJOR BASIN COLORADO RIVER
MINOR BASIN UPPER COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
LOMA, COLORADO

6

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
9	17	62	10	19	0	2	12	10	12	10	56	29	55	47	111	55						
9	24	62	10	18	26	16	3	6	29	17	102	78	57	37	159	86						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE COLORADO
MAJOR BASIN COLORADO RIVER
MINOR BASIN UPPER COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
LOMA, COLORADO 6

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	16	61	1000	0	0	20	0	0	0	0	950	20	560	92	1	87	1																
11	20	61	1000	0	0	0	0	0	0	20	980	0	490	92	2	82	1																
11	1	61	600	0	0	0	0	0	0	80	500	0	80	92	1																		
12	11	61	700	0	0	0	0	0	0	20	670	0	380	82	2	92	1																
12	18	61	1300	0	0	0	0	50	0	50	1240	0	50	82	2	92	1																
1	10	62	600	0	20	0	0	0	0	20	560	0	670	92	1																		
2	6	62	2800	0	0	0	0	0	0	80	2690	0	910	82	3	92	2																
2	22	62	2400	0	0	20	0	0	0	0	2350	0	320	87	3	85	2	82	2	81	1	92	1										
3	5	62	3100	0	20	20	20	0	100	80	2820	80	680	82	3	87	3	92	1	85	1												
3	21	62	2300	0	0	20	0	0	0	40	2240	0	310	92	3	82	2	87	2														
4	2	62	3200	0	0	0	0	60	0	80	3020	0	350	82	3	87	3	92	2	88	1												
4	16	62	6400	0	0	0	20	50	0	90	6220	0	480																				
5	7	62	700	0	0	0	0	0	0	130	530	20	530																				
5	21	62	1200	0	0	0	0	0	0	190	1030	0	120	87	2	92	1	68	1	82	1												
6	4	62	1200	0	0	0	0	50	0	20	1090	20	380	92	2	87	1																
6	18	62	1300	0	0	0	0	0	0	40	1300	0	190	92	2	85	1	88	1	87	1												
7	2	62	2700	0	80	0	0	0	0	440	2170	290	680	82	2	92	2	87	1														
7	16	62	2100	0	0	0	0	0	0	300	1820	80	800	92	3	82	2	87	1														
8	6	62	2900	0	0	60	0	80	0	120	2650	40	660	92	4	82	1	87	1														
8	20	62	8400	0	0	300	0	0	0	1820	6290	40	3290	87	4	68	4	92	4	81	3	88	2	82	2	38	1	79	1	85	1		
9	4	62	6000	0	0	250	0	210	0	1240	4350	210	620	68	4	87	3	81	3	79	3	92	2	88	2	85	1	38	1	51	1		
9	17	62	900	0	0	120	0	10	0	290	530	30	740	68	1	87	1																

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE COLORADO

MAJOR BASIN COLORADO RIVER

MINOR BASIN UPPER COLORADO RIVER

STATION LOCATION COLORADO RIVER AT

LOMA, COLORADO 006

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	16	61	92	24	36	21	65	7	51	4	44	0	0	0											0							0	0
11	1	61	92	43	64	19	36	8	51	7	23	3950	0	0											0							0	0
11	20	61	36	26	92	25	65	7	51	7	35	0	0	9	6	1									0							0	0
12	11	61	36	47	92	30	51	7	65	4	12	0	0	0											0							0	0
12	18	61	36	41	92	24	51	6	65	4	25	290	0	1											0							1	0
1	10	62	92	38	36	25	51	12	65	8	17	50	0	0											0							0	0
2	6	62	36	36	92	26	65	6	86	3	29	60	0	0											0							0	0
2	22	62										20	0	0											0							0	0
3	5	62	36	28	65	24	92	8	46	6	34	210	0	2											0							0	0
3	21	62	92	28	36	24	65	20	71	5	23	0	0	0											0							0	0
4	2	62	36	34	65	16	92	12	71	4	34	20	0	0											0							0	0
4	16	62										0	0	0											0							0	0
5	7	62	92	25	36	14	86	6	51	4	51	0	0	0											0							0	0
5	21	62	65	15	36	14	92	11	52	5	55	0	0	0											0							0	0
6	4	62	92	44	65	13	36	5	71	3	35	0	0	0											0							0	0
6	18	62	92	23	65	9	36	7	51	5	56	0	0	0											0							0	0
7	2	62	36	25	92	21	65	10	71	5	39	0	0	0											0							0	0
7	16	62	92	32	36	22	65	11	56	4	31	0	0	0											0							0	0
8	6	62	92	40	36	11	71	4	65	3	42	0	0	0											0							1	1
8	20	62	92	20	65	19	64	10	36	6	45	0	0	6	22	1									0							0	0
9	4	62	26	12	92	12	64	12	16	11	53	0	0	0											0							1	0
9	17	62	26	19	64	10	70	10	92	10	51	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	COLORADO
MAJOR BASIN	COLORADO RIVER
MINOR BASIN	UPPER COLORADO RIVER
STATION LOCATION	COLORADO RIVER AT LOMA, COLORADO

6

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
11	6	61	3.0	6.8	8.5	1.5	-	-	-	.3	50	140	292	5	14	344	.0	834	2800
11	13	61	3.0	8.2	8.5	1.6	-	-	-	.3	58	136	286	-	18	336	-	814	-
11	20	61	2.0	6.7	8.3	1.4	-	-	-	.3	82	140	344	5	25	328	.1	856	*200
11	27	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
12	11	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	-
12	18	61	1.0	8.3	8.7	3.6	-	-	-	.4	66	144	290	5	21	340	.0	884	12000
1	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
1	9	62	.0	9.2	8.6	4.7	-	-	-	.2	54	136	278	-	32	320	.0	868	15000
1	16	62	1.0	9.5	8.2	2.3	-	-	-	1.5	154	172	440	-	135	440	.2	1037	1300
1	29	62	2.0	9.6	8.1	2.2	-	-	-	1.0	160	168	428	-	28	432	.3	1065	10000
2	6	62	.0	9.2	8.3	2.8	-	-	-	.2	106	140	348	-	148	352	.1	-	5800
2	12	62	2.0	8.3	8.0	-	-	-	-	1.1	70	132	296	-	2000	300	.2	668	9600
2	19	62	2.0	6.0	8.3	.6	-	-	-	1.2	100	296	348	10	460	392	.0	823	4000
2	26	62	2.0	5.7	8.3	2.0	-	-	-	1.0	116	184	340	5	84	328	.0	774	22000
3	5	62	2.0	9.2	7.0	4.1	-	-	-	.2	80	144	328	-	89	336	-	744	120000
3	12	62	2.0	9.8	8.3	3.9	-	-	-	1.3	96	100	300	-	90	328	.0	669	1800
3	26	62	8.0	7.9	8.4	2.7	-	-	-	.6	102	140	300	10	380	344	.0	701	9000
4	2	62	-	-	-	-	-	-	-	-	-	-	-	20	-	-	.0	-	-
4	9	62	8.0	7.0	8.2	4.2	-	-	-	.1	60	128	240	-	460	224	-	459	4900
4	16	62	11.0	6.4	8.1	4.9	-	-	-	.6	36	124	184	-	1700	140	.2	360	9200
4	23	62	10.0	7.6	8.2	3.8	-	-	-	.5	-	100	152	-	550	-	.2	247	4700
4	30	62	8.0	8.2	8.2	-	-	-	-	.6	180	104	152	-	700	120	.4	-	3600
5	7	62	12.0	7.4	8.4	1.5	-	-	-	.8	24	100	152	-	380	112	.3	252	4000
5	14	62	10.0	7.6	8.0	1.6	-	-	-	.2	160	100	140	20	400	80	.0	-	10000
5	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4000
5	21	62	12.0	7.6	8.3	2.3	-	-	-	.5	34	112	170	-	130	136	.9	297	2800
5	28	62	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-
6	4	62	14.0	7.4	8.4	3.2	-	-	-	.2	32	102	188	10	110	152	.1	-	9400
6	18	62	13.0	8.3	8.4	2.4	-	-	-	.2	30	108	344	10	64	160	.0	-	4400
7	2	62	16.0	6.9	8.3	-	-	-	-	.4	28	100	168	5	190	148	.0	-	9400
7	11	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	.0	-	-
7	16	62	18.0	7.0	8.5	-	-	-	-	.5	44	112	252	5	25	125	.0	465	2000
7	23	62	21.0	6.6	8.5	2.2	-	-	-	.3	80	140	328	5	88	376	.0	-	3000
7	30	62	21.0	6.7	8.6	1.1	-	-	-	2.0	78	152	360	-	69	420	.5	-	2100
8	6	62	-	-	-	-	-	-	-	-	-	-	-	10	-	-	.0	-	-
8	20	62	21.0	-	8.5	-	-	-	-	1.0	126	192	608	-	70	620	.8	1237	12000
8	28	62	22.0	6.8	8.6	2.4	-	-	-	1.0	117	170	596	5	80	550	.0	1272	8000
9	4	62	18.0	6.8	8.4	1.8	50	-	-	1.3	158	180	624	10	76	648	.2	1411	25000

NATIONAL WATER QUALITY NETWORK

CHEMICAL. PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE COLORADO
MAJOR BASIN COLORADO RIVER
MINOR BASIN UPPER COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
LOMA, COLORADO

6

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
9	10	62	15.0	7.4	8.4	2.0	-	-	-	1.8	129	228	540	5	46	680	.2	1505	33000
9	17	62	18.0	6.6	8.4	2.0	48	-	-	1.0	144	216	456	-	42	696	.3	1462	18000
9	24	62	17.0	6.6	8.5	2.1	-	-	-	.9	124	212	238	-	2000	620	.3	1294	8500

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OREGON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
CLATSKANIE, OREGON 7

DATE OF SAMPLE			ALGAE *(Number per milliliter)*									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	3	61	1000	0	0	40	0	40	20	580	270	290	20	71	1	69	1																
10	16	61	1700	0	0	100	0	20	0	1160	440	170	170	71	3	69	2	92	1														
11	7	61	1100	0	20	110	0	0	20	780	200	420	540	71	3																		
11	27	61	1200	110	0	50	0	70	0	380	590	50	340	92	1																		
12	5	61	1000	0	0	180	0	50	0	380	410	20	160	71	1																		
12	18	61	1000	0	0	70	0	0	0	590	320	70	180	71	2																		
1	2	62	600	0	0	20	0	20	0	160	360	0	70																				
1	15	62	600	20	0	20	0	0	0	230	340	0	290	71	1																		
2	5	62	600	0	20	0	0	20	0	250	320	20	20	71	1																		
3	5	62	800	0	0	0	0	20	0	260	510	90	190	71	1																		
3	19	62	2600	0	0	90	0	70	70	790	1560	380	320	77	3	71	3																
4	2	62	2500	0	0	0	0	130	230	540	1570	150	310	77	2	62	1	92	1	88	1	73	1										
4	16	62	1900	0	40	60	0	40	20	550	1160	930	630	92	2	71	2																
5	7	62	4700	0	0	40	0	60	0	2050	2550	190	410	71	4	77	2	92	2	88	1	69	1	87	1								
6	4	62	6800	0	0	20	0	270	0	2660	3800	1140	2240	71	4	77	4	69	3	92	2	88	2	82	2	68	1	57	1	84	1	87	1
6	18	62	5000	60	0	80	0	0	0	2530	2320	890	1520	71	4	77	4	69	2	92	2	84	1	93	1								
7	2	62	6800	0	0	40	0	40	40	3120	3500	1100	2280	69	4	77	4	84	4	93	1												
8	6	62	3600	0	40	60	40	0	0	1240	2190	290	80	77	4	92	3	69	3	71	2	84	1										
8	20	62	4700	0	0	110	0	0	0	3170	1390	1560	630	69	4	68	3	84	2	77	2	71	1	92	1	93	1						
9	4	62	110600	108030	40	290	0	0	0	1350	890	1440	550	4	9	71	3	69	2	77	2												
9	17	62	2000	80	0	160	40	80	0	810	790	210	0	69	3	77	1	92	1	71	1												

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OREGON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
CLATSKANIE, OREGON 007

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	3	61	47	25	56	22	58	14	92	8	31	0	0	643	17	7	22	6	11	5					4	51	1					0	0
10	16	61	92	25	82	14	58	12	47	12	37	0	20	186	11	4	17	4	21	3	22	1	13	1	1							0	0
11	7	61	82	31	58	13	9	12	92	11	43	0	0	14											0							0	0
11	27	61	92	32	47	20	58	7	83	3	38	160	0	1											0							0	0
12	5	61	92	22	47	14	58	13	56	6	45	140	0	2											0							0	0
12	18	61	92	17	82	9	47	8	58	8	58	70	0	1											0							0	0
1	2	62	92	26	47	10	58	6	62	5	53	140	0	0											0							0	0
1	15	62	92	16	47	15	80	8	9	7	54	70	0	0											0							0	0
2	5	62	82	12	92	10	80	9	2	6	63	20	0	0											0							0	0
3	5	62	92	17	9	13	36	9	58	7	54	20	0	4											0							0	0
3	19	62	9	29	92	18	47	8	58	6	39	110	0	2											0							1	0
4	2	62	9	20	92	8	62	5	58	5	62	0	0	4											0							2	0
4	16	62	92	19	47	9	62	7	58	7	58	0	0	0											0							1	0
5	7	62	80	38	92	8	61	5	47	4	45	0	0	5											2							1	0
6	4	62	61	24	9	23	47	11	95	7	35	20	0	3											0							0	0
6	18	62	61	26	47	19	80	16	95	13	26	0	0	13	11	2									6							0	0
7	2	62	61	38	47	27	45	8	95	8	19	0	0	55	11	3	15	1	22	1					4	50	1					0	0
8	6	62	58	32	47	24	61	22	92	9	13	0	0	337	11	5	22	5	17	5	46	3	21	1	1							0	0
8	20	62	58	50	47	27	9	10	27	4	9	0	0	1040	11	7	22	7	17	4	15	2	21	2	12	51	2	50	1	76	1	0	0
9	4	62	47	35	58	27	82	14	56	11	13	0	0	569	17	6	11	6	22	5	46	3	21	2	3	51	1					0	0
9	17	62	47	32	82	28	56	12	58	9	19	0	0	351	17	5	11	5	22	3	16	2	2	2	19	76	3	51	1	50	1	0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE OREGON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
CLATSKANIE, OREGON 7

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	16	-	-	-	-	-	-	20	5	164	8	184	9						
10	9	61	10	30	-	-	-	-	-	-	10	5	133	8	143	9						
10	16	61	10	30	-	-	-	-	-	-	20	5	140	9	160	10						
10	22	61	11	6	0	1	0	1	0	1	10	6	181	9	191	11						
10	30	61	11	15	-	-	-	-	-	-	16	6	235	10	251	12						
11	6	61	11	21	-	-	-	-	-	-	6	5	136	8	142	9						
11	13	61	11	28	-	-	-	-	-	-	14	5	130	8	144	9						
11	20	61	12	4	-	-	-	-	-	-	14	5	180	8	194	9						
11	27	61	12	6	0	1	0	1	0	1	19	5	90	7	109	9						
12	5	61	12	27	-	-	-	-	-	-	19	5	75	6	94	8						
12	11	61	1	4	-	-	-	-	-	-	17	5	90	7	107	9						
12	26	61	1	17	0	0	0	0	0	0	45	5	57	5	102	7						
1	2	62	1	15	-	-	-	-	-	-	18	4	79	5	97	7						
1	8	62	1	24	-	-	-	-	-	-	18	5	103	7	121	8						
1	15	62	1	26	-	-	-	-	-	-	38	6	150	8	188	10						
2	15	62	2	27	0	1	0	1	0	1	30	4	143	7	173	8						
2	19	62	3	2	-	-	-	-	-	-	29	5	115	6	144	8						
2	26	62	3	12	0	0	0	1	0	1	23	4	154	8	177	9						
3	5	62	3	19	-	-	-	-	-	-	26	6	119	8	145	9						
3	12	62	3	26	0	0	0	1	0	1	19	5	97	7	118	9						
3	19	62	4	4	-	-	-	-	-	-	23	5	127	8	150	9						
3	26	62	4	16	0	0	1	1	1	1	19	7	136	7	155	10						
4	2	62	4	19	-	-	-	-	-	-	30	6	93	7	123	9						
5	1	62	6	4	0	0	0	0	0	0	54	6	27	5	81	8						
5	7	62	6	19	-	-	-	-	-	-	18	7	28	7	46	10						
5	14	62	6	22	-	-	-	-	-	-	31	7	28	7	59	10						
5	21	62	6	28	-	-	-	-	-	-	23	6	47	6	70	8						
5	28	62	7	2	0	0	0	1	0	1	27	6	41	6	68	8						
6	4	62	7	6	-	-	-	-	-	-	18	4	36	5	54	6						
6	11	62	7	10	-	-	-	-	-	-	35	6	52	8	87	10						
6	18	62	7	20	-	-	-	-	-	-	17	3	40	3	57	4						
8	13	62	9	5	0	1	0	1	0	1	21	3	139	5	160	6						
8	20	62	9	26	-	-	-	-	-	-	6	6	56	7	62	9						
8	27	62	9	17	0	0	0	1	0	1	16	5	120	8	136	9						
9	4	62	9	28	-	-	-	-	-	-	5	6	117	8	122	10						
9	10	62	10	9	-	-	-	-	-	-	13	5	106	8	119	9						
9	17	62	10	14	-	-	-	-	-	-	1	5	87	8	88	9						
9	24	62	10	19	0	0	0	0	0	0	6	3	95	6	101	7						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE OREGON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER

STATION LOCATION COLUMBIA RIVER AT
CLATSKANIE, OREGON 7

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES											
BEGINNING			END								NEUTRALS									
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	3	61	10	13	5030	106	36	70	1	8	11	2	0	8	1	4	3	1	8
12	5	61	12	14	5160	92	35	57	1	9	10	1	1	8	0	6	2	0	7
1	3	62	1	12	5150	100	30	70	2	6	9	3	1	5	0	5	2	0	6
2	6	62	2	16	4450	108	32	76	1	6	9	1	1	6	1	6	2	0	8
3	6	62	3	16	6240	85	36	49	1	7	12	2	1	7	2	5	4	0	7
4	13	62	4	23	5560	90	38	52	3	9	10	2	1	7	0	5	3	1	7
5	1	62	5	18	3880	130	63	67	3	18	16	2	2	11	1	8	8	1	9
6	12	62	6	28	3090	147	63	84	2	21	12	2	1	9	0	11	6	1	10
8	20	62	9	4	2930	159	52	107	1	13	17	2	2	13	0	6	4	1	10
9	20	62	10	3	3290#	117	39	78	0	8	18	4	3	11	0	4	2	1	6

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE OREGON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
CLATSKANIE, OREGON 7

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	-	-	7.1	-	-	-	-	-	10	-	-	10	0	25	-	-	-
10	3	61	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-	-	3700
10	9	61	-	-	7.9	-	-	-	-	-	-	66	-	10	-	-	.0	-	-
10	22	61	-	-	-	-	-	-	-	-	9	62	68	5	0	22	.0	-	-
10	30	61	-	-	-	-	-	-	-	-	8	58	76	5	-	-	.0	-	-
11	6	61	-	-	7.7	-	-	-	-	-	8	56	76	10	-	20	-	-	-
11	7	61	-	10.1	7.2	1.3	9	-	-	.0	8	37	-	8	4	14	.0	97	-
11	13	61	-	-	-	-	-	-	-	-	8	32	68	5	-	17	-	-	-
11	20	61	7.7	-	7.7	-	-	-	-	-	-	-	-	-	-	24	.1	105	-
11	27	61	-	-	-	-	-	-	-	-	5	34	36	-	-	9	-	-	4000
12	5	61	-	-	7.2	1.6	13	-	-	.6	3	44	86	8	5	8	.2	106	-
12	11	61	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	68	-
12	26	61	-	-	-	-	-	-	-	-	6	22	28	-	-	-	-	-	-
1	2	62	-	-	7.5	-	-	-	-	-	-	-	80	10	-	-	.0	-	-
1	3	62	-	11.9	7.7	2.1	37	-	-	.6	3	40	54	10	9	9	.1	90	2600
1	8	62	-	-	7.4	-	-	-	-	-	6	-	-	5	-	18	-	-	-
1	12	62	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-
1	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	19	-	-	-
2	6	62	5.0	13.0	7.5	2.7	-	-	-	.6	6	53	84	4	5	11	.1	127	340
2	9	62	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-
2	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-
2	19	62	-	-	-	-	-	-	-	-	5	-	-	15	-	-	-	-	-
3	6	62	5.3	12.2	7.2	2.4	-	.9	6.2	.5	4	51	66	5	16	12	.0	111	4100
3	26	62	-	-	-	-	-	-	-	-	6	64	64	5	-	19	.0	-	-
4	2	62	-	-	-	-	-	-	-	-	7	-	64	0	-	25	-	-	-
4	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1100
4	13	62	-	-	-	-	67	-	-	-	-	-	-	-	-	-	-	-	-
5	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	15	.0	-	-
5	14	62	-	-	-	-	-	-	-	-	5	-	-	-	-	15	.0	-	-
5	21	62	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-
6	12	62	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	3500
8	8	62	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-
8	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1600
9	4	62	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
9	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	470
9	24	62	-	-	7.9	-	-	-	-	-	6	60	72	5	*25	19	-	115	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Clatskanie, Oregon
Data Supplied by U.S. Geological Survey

STATE Oregon
MAJOR BASIN Pacific Northwest
MINOR BASIN Columbia River below Yakima River
STATION LOCATION Columbia River at
Clatskanie, Oregon

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	103.000	147.000	203.000	215.000	180.000	172.000	215.000	362.000	506.000	340.000	229.000	137.000
2	100.000	138.000	203.000	204.000	178.000	161.000	221.000	360.000	512.000	341.000	229.000	134.000
3	104.000	136.000	195.000	222.000	184.000	133.000	203.000	364.000	530.000	328.000	235.000	134.000
4	108.000	142.000	181.000	268.000	196.000	173.000	204.000	374.000	520.000	319.000	240.000	129.000
5	105.000	147.000	206.000	253.000	190.000	182.000	233.000	375.000	529.000	321.000	235.000	129.000
6	98.000	143.000	203.000	239.000	188.000	182.000	250.000	368.000	506.000	316.000	234.000	124.000
7	100.000	134.000	193.000	261.000	189.000	170.000	280.000	345.000	486.000	320.000	218.000	123.000
8	101.000	132.000	180.000	277.000	192.000	170.000	432.000	351.000	465.000	316.000	214.000	125.000
9	105.000	123.000	168.000	287.000	194.000	171.000	448.000	365.000	455.000	309.000	217.000	110.000
10	103.000	125.000	159.000	300.000	204.000	168.000	396.000	374.000	454.000	305.000	209.000	112.000
11	123.000	134.000	150.000	267.000	208.000	171.000	339.000	405.000	468.000	292.000	195.000	126.000
12	130.000	135.000	146.000	238.000	197.000	171.000	301.000	406.000	471.000	283.000	183.000	124.000
13	139.000	135.000	145.000	226.000	205.000	164.000	299.000	382.000	482.000	279.000	173.000	121.000
14	135.000	130.000	140.000	207.000	224.000	157.000	278.000	379.000	451.000	263.000	183.000	123.000
15	124.000	135.000	140.000	195.000	237.000	150.000	244.000	368.000	456.000	257.000	163.000	118.000
16	121.000	133.000	149.000	185.000	221.000	146.000	267.000	367.000	409.000	257.000	160.000	114.000
17	115.000	134.000	198.000	184.000	216.000	151.000	280.000	337.000	452.000	259.000	160.000	109.000
18	111.000	137.000	208.000	192.000	216.000	147.000	282.000	325.000	442.000	257.000	159.000	117.000
19	117.000	120.000	203.000	184.000	209.000	144.000	308.000	330.000	441.000	251.000	160.000	122.000
20	125.000	116.000	298.000	180.000	202.000	143.000	367.000	327.000	418.000	254.000	154.000	117.000
21	129.000	121.000	401.000	165.000	191.000	157.000	365.000	328.000	412.000	239.000	148.000	122.000
22	128.000	163.000	358.000	165.000	193.000	179.000	375.000	328.000	411.000	238.000	156.000	108.000
23	120.000	225.000	323.000	157.000	211.000	186.000	360.000	328.000	415.000	232.000	160.000	105.000
24	131.000	229.000	354.000	159.000	180.000	200.000	351.000	337.000	409.000	219.000	161.000	103.000
25	145.000	186.000	380.000	166.000	182.000	245.000	353.000	384.000	404.000	222.000	157.000	98.800
26	135.000	189.000	316.000	184.000	184.000	286.000	356.000	433.000	402.000	225.000	154.000	106.000
27	153.000	214.000	278.000	185.000	165.000	330.000	377.000	470.000	393.000	215.000	154.000	115.000
28	159.000	191.000	252.000	188.000	139.000	329.000	440.000	482.000	376.000	216.000	152.000	118.000
29	164.000	204.000	250.000	187.000		313.000	419.000	498.000	357.000	212.000	154.000	121.000
30	148.000	196.000	251.000	188.000		268.000	390.000	517.000	346.000	218.000	143.000	120.000
31	156.000		239.000	182.000		236.000		511.000		220.000	140.000	

Computed as sum of Columbia River near The Dalles, Oregon plus 4 times the sum of Klickitat River near Pitt, Washington and Hood River and Conduit near Hood River, Oregon, plus Willamette River at Salem, Oregon plus 4.5 times the Cowlitz River at Castle Rock, Washington.

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OREGON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
BONNEVILLE, OREGON 8

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	9	61	1900	40	20	210	0	0	0	1350	310	1010	170	71	3	69	1	68	1														
10	23	61	1900	20	0	150	0	0	0	1470	310	540	230	71	3	69	1	92	1														
11	6	61	500	0	0	70	0	0	0	400	70	270	360	71	1																		
11	20	61	2800	250	0	540	0	0	20	1710	320	410	430	71	4	69	1	25	1	3	1												
12	11	61	1200	50	0	270	0	0	20	230	680	160	200	25	1																		
12	26	61	400	0	0	0	0	0	0	120	230	80	120																				
1	8	62	600	0	0	20	0	0	0	230	390	20	100																				
1	22	62	600	0	0	20	0	0	0	210	410	20	120																				
2	12	62	1900	0	0	60	0	60	0	890	850	100	100	71	1	92	1	88	1														
2	19	62	1000	0	0	0	0	50	0	230	700	20	410	77	1																		
3	5	62	1700	40	0	40	0	20	60	580	990	100	80	71	2	77	2	92	1	88	1												
3	19	62	2900	20	0	50	0	90	0	700	2010	500	410	77	4	71	2																
4	2	62	2300	0	0	20	0	80	0	390	1840	210	330	77	2	92	1	88	1														
4	16	62	1500	0	0	0	0	0	0	490	990	550	820	71	2	92	2	88	1														
5	14	62	13200	20	190	60	0	630	0	3230	9070	1600	2680	92	5	71	5	77	4	85	3	69	3	81	2	80	2	82	2	87	2	88	2
5	28	62	7100	0	0	60	0	20	0	2260	4770	1140	3020	77	4	71	4	92	4	69	3	82	3	88	2	84	1						
6	11	62	7500	0	0	60	0	80	0	2300	5100	500	440	77	5	71	4	69	3	92	3	87	2	82	1	85	1	84	1	93	1		
6	25	62	6200	0	150	20	0	20	0	3000	3020	970	2070	77	4	71	4	69	3	92	2	93	1	82	1								
7	9	62	7300	370	0	40	80	120	0	1990	4720	540	700	77	5	71	3	69	3	92	3	68	2	93	2	87	1	82	1				
7	23	62	4900	20	0	90	0	20	0	1080	3740	1370	1130	77	5	69	2	93	2	71	1	70	1	84	1								
8	6	62	4500	0	100	0	0	0	40	1900	2440	210	580	77	3	69	3	68	2	71	2	92	2	84	1								
8	20	62	3200	0	40	150	0	0	0	1690	1370	1180	930	69	3	84	2	77	2	92	2	71	1	68	1								
9	4	62	2400	0	60	80	0	40	40	950	1180	620	250	69	2	77	1	84	1														
9	17	62	200	10	0	40	0	0	0	90	70	200	280																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	OREGON
MAJOR BASIN	PACIFIC NORTHWEST
MINOR BASIN	COLUMBIA RIVER BELOW YAKIMA RIVER
STATION LOCATION	COLUMBIA RIVER AT BONNEVILLE, OREGON 008

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)											MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA								
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
10	9	61	82	33	47	25	92	17	58	6	19	0	10	56	11	3	17	2	22	1					0							0	0
10	23	61	92	26	82	14	58	13	47	9	38	40	10	20	11	2									1							0	0
11	6	61	82	19	58	16	47	13	92	11	41	0	0	2											0							0	0
11	20	61	82	24	58	20	92	11	47	7	38	360	0	3											0							0	0
12	11	61	36	11	58	10	47	9	92	9	61	0	0	0											0							0	0
12	26	61	92	22	36	10	80	7	47	6	55	0	0	0											0							1	0
1	8	62	36	12	58	7	92	6	47	6	69	0	10	0											0							2	0
1	22	62	92	13	36	11	71	10	64	5	61	0	0	1											0							0	0
2	12	62	92	13	70	11	82	8	47	7	61	60	0	7	11	1									0							0	0
2	19	62	9	15	92	8	47	5	82	5	67	0	0	0											2							0	0
3	5	62	9	24	92	17	71	7	58	4	48	0	0	0											0							0	0
3	19	62	9	56	82	6	92	3	47	3	32	0	10	2											0							0	0
4	2	62	92	14	9	12	47	5	2	5	64	0	0	2											0							0	1
4	16	62	92	23	9	8	2	6	82	5	58	0	10	6											0							1	0
5	14	62	80	41	92	15	47	13	61	12	19	20	0	3											1							0	0
5	28	62	61	34	47	16	92	14	9	11	25	0	0	3											1							0	0
6	11	62	61	40	9	19	95	19	47	9	13	0	10	8	11	1									1							0	1
6	25	62	61	27	47	23	95	13	80	11	26	0	0	7	11	1									1							1	1
7	9	62	61	32	47	16	80	11	9	9	32	0	10	3											2							0	0
7	23	62	9	34	47	21	82	10	61	8	27	20	0	117	11	5	15	1							2							2	0
8	6	62	47	32	58	30	92	9	60	5	24	0	0	243	11	6	17	4	22	2	21	1	16	1	0							0	0
8	20	62	58	44	47	40	9	5	92	3	8	0	0	648	11	7	22	6	17	5	21	2			0							0	0
9	4	62	58	32	82	28	47	18	92	4	18	0	0	234	11	5	17	4	22	3	16	2	21	1	0							0	0
9	17	62	47	28	82	23	58	13	80	8	28	0	0	150	17	4	11	4	22	3					6	50	1	76	1			0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE OREGON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER

STATION LOCATION COLUMBIA RIVER AT

BONNEVILLE, OREGON 8

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA							DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL					ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±		MO.	DAY	μμc/g	±	μμc/g	±
10	9	61	10	25	-	-	-	-	-	-	11	4	189	8	200	9							
10	23	61	11	6	0	0	1	1	1	1	20	4	421	11	441	12							
11	6	61	11	21	-	-	-	-	-	-	14	5	147	8	161	9							
11	20	61	12	1	-	-	-	-	-	-	26	5	351	10	377	11							
12	11	61	12	22	-	-	-	-	-	-	29	6	423	11	452	13							
12	26	61	1	11	0	1	1	1	1	1	46	5	327	9	373	10							
1	8	62	1	18	0	1	1	1	1	1	43	5	382	10	425	11							
1	22	62	2	5	0	0	0	1	0	1	73	5	281	9	354	10							
2	12	62	2	27	-	-	-	-	-	-	29	6	305	10	334	12							
2	19	62	3	7	0	1	0	1	0	1	30	4	226	8	256	9							
3	5	62	3	19	-	-	-	-	-	-	48	6	226	9	274	11							
3	19	62	4	4	0	0	2	1	2	1	26	5	258	9	284	10							
4	2	62	4	19	-	-	-	-	-	-	34	5	267	9	301	10							
4	16	62	4	30	-	-	-	-	-	-	51	7	99	8	150	11							
5	14	62	6	22	-	-	-	-	-	-	29	6	66	8	95	10							
5	28	62	7	2	1	2	0	2	1	3	49	10	82	8	131	13							
6	11	62	7	16	-	-	-	-	-	-	28	6	65	8	93	10							
6	25	62	7	24	0	1	0	1	0	1	14	5	76	7	90	9							
7	9	62	8	7	-	-	-	-	-	-	20	5	81	7	101	8							
7	23	62	8	21	0	1	0	1	0	1	18	5	81	7	99	8							
8	6	62	8	27	-	-	-	-	-	-	23	3	181	5	204	6							
8	20	62	9	6	-	-	-	-	-	-	18	5	187	10	205	11							
9	4	62	10	1	-	-	-	-	-	-	9	6	118	8	127	10							
9	17	62	10	16	-	-	-	-	-	-	9	5	136	9	145	10							

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE OREGON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER

STATION LOCATION COLUMBIA RIVER AT
BONNEVILLE, OREGON 8

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	10	61	10	16	5010	57	15	42	-	-	-	-	-	-	-	-	-	-	-
11	6	61	11	20	4841	64	18	46	-	-	-	-	-	-	-	-	-	-	-
12	11	61	12	26	5222	71	18	53	-	-	-	-	-	-	-	-	-	-	-
12	11	61		*	15073	64	17	47	1	4	7	1	1	5	0	2	1	0	2
1	8	62	1	22	5192	90	14	76	-	-	-	-	-	-	-	-	-	-	-
2	12	62	2	19	3511	66	21	45	-	-	-	-	-	-	-	-	-	-	-
3	5	62	3	12	3312	90	16	74	-	-	-	-	-	-	-	-	-	-	-
3	5	62		*	12015	83	17	66	0	4	6	1	1	4	0	2	1	0	4
4	2	62	4	16	3994	105	35	70	-	-	-	-	-	-	-	-	-	-	-
5	15	62	5	28	2814	118	49	69	-	-	-	-	-	-	-	-	-	-	-
6	11	62	6	22	4358	71	32	39	-	-	-	-	-	-	-	-	-	-	-
6	11	62		*	11166	95	37	58	1	11	11	2	1	8	0	5	3	1	5
7	9	62	7	18	4790	45	14	31	-	-	-	-	-	-	-	-	-	-	-
8	6	62	8	20	5052	57	14	43	-	-	-	-	-	-	-	-	-	-	-
9	4	62	9	17	3036	121	37	84	-	-	-	-	-	-	-	-	-	-	-
9	4	62		*	12878	67	19	48	1	5	7	1	1	5	0	3	1	0	2

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	OREGON
MAJOR BASIN	PACIFIC NORTHWEST
MINOR BASIN	COLUMBIA RIVER BELOW YAKIMA RIVER
STATION LOCATION	COLUMBIA RIVER AT
	BONNEVILLE, OREGON 8

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3700
10	9	61	15.0	8.9	8.5	.9	3	.7	2.3	.2	5	71	77	5	5	16	.0	127	*1
10	23	61	13.5	9.4	8.3	1.1	15	.8	2.2	.2	5	69	77	2	5	17	.0	138	*1
11	6	61	10.2	10.0	8.2	1.0	11	.5	2.3	.2	5	71	76	3	5	16	.0	109	*20
11	20	61	8.2	10.7	8.2	.9	15	.7	2.0	.2	5	71	78	5	5	16	.0	130	*1
12	11	61	6.2	11.1	8.1	.9	12	.6	1.3	.2	4	66	72	5	5	16	.0	130	-
12	12	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*1
12	26	61	5.7	11.5	8.0	1.1	13	.6	2.2	.2	5	62	59	5	30	15	.1	116	12
1	8	62	6.8	11.3	8.1	.5	23	1.1	2.4	.2	6	71	75	5	5	16	.0	150	*1
1	22	62	2.0	12.5	8.0	1.0	6	.7	1.7	.2	6	70	74	5	15	17	.1	129	-
2	12	62	5.0	12.6	8.2	1.3	14	.7	1.5	.2	5	73	77	5	15	17	.1	138	*1
2	19	62	5.5	12.7	8.2	.6	8	.5	1.4	.2	6	71	77	5	15	16	.0	123	90
3	5	62	4.5	12.1	8.1	1.1	19	.5	1.8	.2	6	68	72	5	10	15	.1	129	5
3	12	62	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-
3	19	62	5.8	12.2	8.1	.8	8	.5	1.5	.2	5	78	86	5	5	18	.1	143	*1
4	2	62	8.3	10.9	8.0	1.2	12	.9	2.0	.2	4	71	79	10	20	16	.1	139	*1
4	16	62	10.4	11.1	8.0	.8	16	1.3	2.4	.2	4	59	61	10	25	13	.1	115	*5
4	30	62	10.1	11.7	8.1	1.8	13	1.3	2.2	.1	3	54	62	5	20	12	.1	97	-
5	14	62	11.7	11.7	8.3	1.7	27	1.1	2.2	.2	2	53	57	5	20	11	.0	86	7
5	28	62	13.1	11.3	8.2	1.2	21	1.1	2.3	.2	1	49	53	5	30	10	.0	88	-
6	11	62	14.3	11.3	8.2	1.3	13	1.1	2.1	.2	1	49	54	5	20	11	.0	68	-
6	25	62	17.0	10.7	8.2	.9	13	1.4	2.0	.3	2	46	50	0	10	10	.0	63	*5
7	9	62	-	10.3	8.3	.7	9	1.1	2.0	.1	2	51	58	5	15	10	.0	83	-
7	16	62	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
7	23	62	19.5	9.7	8.4	.4	9	.9	1.8	.2	1	52	58	5	10	10	.0	68	15
8	6	62	21.0	8.9	8.4	1.2	12	.9	1.8	.2	2	54	61	5	10	11	.0	80	26
8	20	62	20.8	8.9	8.4	1.4	9	.7	1.4	.2	2	58	64	5	5	12	.0	96	5
9	4	62	19.3	8.5	8.3	.5	11	.5	1.6	.2	2	60	64	5	5	12	.0	103	3
9	17	62	17.7	8.7	8.3	1.0	15	.7	1.6	.2	3	62	64	5	5	13	.0	95	-
9	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Bonneville, Oregon
Supplied by U.S. Geological Survey

STATE	Oregon
MAJOR BASIN	Pacific Northwest
MINOR BASIN	Columbia River below Yakima River
STATION LOCATION	Columbia River at Bonneville, Oregon

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	86.700	111.000	93.400	85.400	124.000	127.000	129.000	267.000	429.000	295.000	205.000	119.000
2	84.900	100.000	93.300	87.000	123.000	117.000	135.000	264.000	440.000	298.000	206.000	116.000
3	88.300	97.100	95.300	92.000	127.000	88.100	123.000	263.000	450.000	290.000	212.000	116.000
4	92.000	97.000	93.900	89.200	134.000	126.000	130.000	259.000	445.000	284.000	213.000	111.000
5	89.700	104.000	99.700	91.700	130.000	120.000	158.000	261.000	458.000	285.000	207.000	112.000
6	81.400	102.000	101.000	91.000	132.000	108.000	167.000	266.000	440.000	281.000	205.000	107.000
7	80.600	98.400	106.000	95.200	134.000	98.400	193.000	250.000	424.000	285.000	190.000	106.000
8	81.400	98.200	101.000	97.100	136.000	101.000	232.000	260.000	405.000	283.000	186.000	108.000
9	85.400	91.300	96.500	108.000	135.000	104.000	252.000	273.000	391.000	276.000	189.000	93.000
10	82.800	93.400	95.600	146.000	139.000	106.000	241.000	276.000	385.000	270.000	183.000	95.200
11	91.900	94.300	92.400	140.000	139.000	112.000	209.000	306.000	398.000	257.000	170.000	106.000
12	96.600	90.400	95.300	130.000	131.000	113.000	189.000	319.000	408.000	248.000	159.000	102.000
13	101.000	93.300	95.000	130.000	143.000	112.000	199.000	291.000	422.000	245.000	150.000	98.900
14	93.900	91.600	91.100	122.000	144.000	107.000	181.000	297.000	394.000	231.000	160.000	101.000
15	90.900	96.500	87.500	115.000	142.000	102.000	181.000	296.000	392.000	226.000	140.000	97.300
16	92.200	96.400	87.300	111.000	139.000	99.100	206.000	296.000	388.000	229.000	139.000	94.200
17	89.400	98.700	89.500	115.000	140.000	103.000	230.000	270.000	391.000	230.000	139.000	90.900
18	85.200	104.000	97.600	125.000	137.000	99.800	225.000	261.000	381.000	228.000	138.000	97.900
19	91.700	89.300	93.300	122.000	132.000	96.700	251.000	265.000	382.000	225.000	139.000	103.000
20	101.000	87.200	110.000	124.000	132.000	95.900	278.000	265.000	361.000	228.000	133.000	98.900
21	105.000	92.100	116.000	116.000	130.000	106.000	283.000	269.000	355.000	213.000	129.000	104.000
22	106.000	102.000	97.900	115.000	138.000	125.000	300.000	267.000	355.000	212.000	135.000	89.300
23	97.400	99.300	98.200	113.000	156.000	126.000	289.000	269.000	360.000	205.000	140.000	86.700
24	98.300	95.500	101.000	115.000	126.000	129.000	279.000	274.000	355.000	191.000	141.000	85.300
25	111.000	85.500	98.400	123.000	134.000	121.000	278.000	313.000	347.000	198.000	138.000	81.100
26	103.000	84.200	90.000	126.000	139.000	124.000	284.000	351.000	344.000	198.000	135.000	89.400
27	110.000	98.000	90.900	125.000	123.000	150.000	299.000	384.000	338.000	189.000	135.000	98.600
28	110.000	90.500	89.800	128.000	96.800	156.000	307.000	398.000	328.000	191.000	133.000	99.500
29	113.000	91.700	91.600	130.000		165.000	298.000	414.000	314.000	187.000	134.000	96.700
30	105.000	91.200	86.200	132.000		152.000	285.000	439.000	304.000	193.000	126.000	94.900
31	118.000		87.700	127.000		138.000		438.000		196.000	123.000	

Computed as sum of Columbia River near The Dalles, Oregon plus twice the sum of Klickitat River near Pitt, Washington and Hood River and conduit near Hood River, Oregon.

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE OREGON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
MCNARY DAM, OREGON 81

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	13	0	0	2	1	2	1	160	7	76	7	236	10						
10	9	61	10	30	0	1	1	1	1	1	37	5	298	10	335	11						
10	16	61	10	31	0	0	0	1	0	1	147	11	129	12	276	16						
11	6	61	11	28	0	1	1	1	1	1	54	5	157	8	211	9						
11	13	61	11	27	0	0	2	1	2	1	39	5	412	11	451	12						
11	20	61	12	1	-	-	-	-	-	-	41	6	651	13	692	14						
11	27	61	12	6	0	0	1	1	1	1	68	5	538	12	606	13						
12	4	61	12	14	0	0	1	1	1	1	57	5	634	12	691	13						
12	11	61	12	22	0	0	1	1	1	1	37	5	462	11	499	12						
12	18	61	1	2	0	0	1	1	1	1	85	5	442	11	527	12						
12	25	61	1	5	0	0	1	1	1	1	37	5	363	10	400	11						
1	15	62	1	29	0	1	1	1	1	1	45	5	262	9	307	10						
1	22	62	2	6	0	1	1	1	1	1	42	5	338	9	380	10						
1	29	62	2	9	0	0	1	1	1	1	36	4	270	9	306	10						
2	5	62	2	15	0	0	1	1	1	1	46	5	419	11	465	12						
2	12	62	2	23	0	0	1	1	1	1	97	6	367	10	464	12						
2	19	62	3	2	0	0	1	1	1	1	36	9	266	9	302	13						
2	26	62	3	12	0	1	1	1	1	1	136	6	351	10	487	12						
3	5	62	3	19	0	1	0	1	0	1	50	5	266	9	316	10						
3	12	62	3	26	0	1	1	1	1	1	67	5	426	11	493	12						
3	19	62	4	4	0	1	1	1	1	1	107	6	325	10	432	12						
3	26	62	4	10	0	1	0	1	0	1	35	6	387	11	422	13						
4	2	62	4	19	0	1	1	1	1	1	61	5	251	9	312	10						
4	9	62	4	26	-	-	-	-	-	-	159	6	67	8	226	10						
4	16	62	4	30	-	-	-	-	-	-	40	6	168	8	208	10						
4	23	62	5	25	-	-	-	-	-	-	58	7	89	8	147	11						
5	7	62	6	13	0	0	1	1	1	1	9	5	68	7	77	9						
5	21	62	6	27	-	-	-	-	-	-	13	5	70	7	83	9						
5	28	62	6	29	-	-	-	-	-	-	16	3	50	4	66	5						
6	4	62	7	3	0	0	1	1	1	1	21	5	61	6	82	7						
6	11	62	7	10	-	-	-	-	-	-	20	5	50	7	70	9						
6	18	62	7	17	-	-	-	-	-	-	30	5	119	8	149	9						
6	25	62	7	25	-	-	-	-	-	-	13	7	131	8	144	11						
7	2	62	8	1	0	0	0	0	0	0	15	6	70	7	85	9						
7	9	62	8	10	-	-	-	-	-	-	13	3	109	4	122	5						
7	16	62	8	14	-	-	-	-	-	-	16	5	103	8	119	9						
7	24	62	8	15	-	-	-	-	-	-	5	5	87	7	92	8						
7	30	62	8	22	-	-	-	-	-	-	18	6	198	9	216	11						
8	6	62	8	23	0	1	0	1	0	1	16	5	213	10	229	11						
8	13	62	8	27	-	-	-	-	-	-	22	3	227	5	249	6						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	OREGON
MAJOR BASIN	PACIFIC NORTHWEST
MINOR BASIN	COLUMBIA RIVER BELOW YAKIMA RIVER
STATION LOCATION	COLUMBIA RIVER AT MCNARY DAM, OREGON 81

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	20	62	9	7	-	-	-	-	-	-	33	5	132	7	165	8						
8	27	62	9	18	-	-	-	-	-	-	38	7	101	9	139	11						
9	3	62	9	24	0	0	0	1	0	1	23	6	151	9	174	11						
9	10	62	10	8	-	-	-	-	-	-	24	5	201	9	225	10						
9	17	62	10	16	-	-	-	-	-	-	20	5	266	11	286	12						
9	24	62	10	18	-	-	-	-	-	-	19	7	333	11	352	13						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OREGON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
MCNARY DAM, OREGON 81

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	300	0	0	20	0	20	0	100	100	20	40																				
10	16	61	300	0	0	40	0	0	0	200	20	130	70																				
11	6	61	500	0	0	0	0	20	20	170	350	80	210	92	1																		
11	20	61	600	0	0	20	0	20	20	310	180	110	360																				
12	4	61	200	0	0	0	0	0	0	150	20	100	100																				
12	18	61	300	0	0	0	0	0	0	230	50	0	50	71	1																		
1	1	62	100	0	0	20	0	0	0	50	20	20	50																				
1	15	62	900	0	0	20	0	0	0	90	810	20	410	88	1	87	1	92	1														
2	5	62	1100	140	0	20	0	20	0	270	610	110	140	71	1																		
2	19	62	1000	0	0	20	0	90	70	340	500	110	140	92	1	77	1																
3	5	62	1400	20	0	0	0	0	50	780	580	180	340	77	2	71	1																
3	19	62	1500	0	0	50	0	20	20	290	1110	200	270	77	3	71	1																
4	2	62	1100	60	0	40	0	20	20	230	700	40	100	77	1																		
4	16	62	3100	550	0	40	0	330	20	910	1240	480	440	71	3	77	3	4	2	51	1	5	1										
5	7	62	3800	40	0	20	0	170	20	1100	2420	270	170	77	3	71	3	92	2	88	1	69	1	51	1								
5	21	62	3700	0	0	0	0	250	0	1770	1650	340	1160	69	3	92	3	71	3	57	1	82	1										
6	4	62	4800	0	0	60	0	250	0	1940	2550	630	2870	71	3	77	3	69	3	92	3	57	1	93	1	82	1						
6	18	62	3800	0	0	60	0	40	20	1060	2630	170	350	92	3	71	2	77	2	69	2	93	1	84	1								
7	2	62	300	0	0	40	0	0	0	130	130	0	250																				
7	16	62	2800	20	0	0	0	0	0	450	2320	450	1440	77	3	92	2	69	2	93	2												
8	6	62	3000	40	120	20	0	0	0	930	1860	210	790	77	3	68	2	69	1	92	1												
8	20	62	2400	0	40	360	0	0	0	1270	720	1690	760	68	3	92	2	25	1	69	1	84	1										
9	3	62	7700	0	250	910	0	300	40	4900	1310	2490	840	25	2	26	1	51	1	16	1	69	1										
9	17	62	500	30	0	90	90	80	90	40	70	130	260																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OREGON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER

STATION LOCATION COLUMBIA RIVER AT
MCNARY DAM, OREGON 081

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA								
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
10	2	61	92	41	82	16	47	12	58	10	21	0	0	39	17	2	21	2	11	1					2							0	0
10	16	61	58	39	92	26	47	9	82	9	17	0	0	13	21	1									11	51	2					0	0
11	6	61	92	29	58	18	36	11	47	10	32	0	0	0											1							0	0
11	20	61	92	13	36	11	47	9	82	8	59	0	0	0											0							0	0
12	4	61	2	11	47	9	71	7	82	6	67	0	0	0											0							0	0
12	18	61	92	18	80	15	71	7	56	6	54	20	0	0											0							0	0
1	1	62	92	21	80	12	36	8	95	8	51	0	0	1											0							0	0
1	15	62	92	13	71	11	65	8	80	5	63	0	0	1											0							0	0
2	5	62	92	17	62	8	2	6	47	6	63	0	0	4											1							0	0
2	19	62	92	10	36	8	9	7	95	7	68	0	0	0											1							0	0
3	5	62	9	33	82	15	95	5	62	4	43	0	0	1											0							0	0
3	19	62	9	36	95	11	82	6	92	6	41	0	0	0											0							0	0
4	2	62	47	18	9	10	80	9	92	9	54	0	0	0											0							0	0
4	16	62	9	25	82	24	80	7	65	7	37	0	0	28	11	3									0							0	2
5	7	62	80	24	9	20	61	15	82	8	33	20	0	3											2							0	0
5	21	62	80	27	61	16	92	13	47	10	34	20	0	6											1							0	0
6	4	62	80	29	92	17	62	13	61	10	31	0	0	6	11	1									2							0	0
6	18	62	95	36	9	29	61	22	80	5	8	0	0	9	11	1									3	50	1					0	0
7	2	62	61	35	9	13	47	13	95	12	27	0	0	2											1							0	5
7	16	62	9	43	47	12	95	12	61	11	22	0	0	23	17	2	11	1							4							0	0
8	6	62	47	28	58	18	95	18	56	6	30	0	0	17	11	2									1							0	0
8	20	62	27	37	47	35	92	11	58	9	8	0	0	97	11	4	16	2	17	2	21	1			15	51	3	76	1			0	0
9	3	62	82	61	58	12	47	8	92	7	12	0	0	312	17	5	11	5	21	4	16	3	22	2	27	50	3	76	2	53	1	0	0
9	17	62	82	38	47	12	26	6	62	5	39	0	0	178	17	4	11	4	22	3	21	2	16	1	55	51	4	50	4	76	2	0	0

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NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE OREGON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
MCNARY DAM, OREGON 81

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END			TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY							TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS				
10	2	61	10	16	5000	194	44	150	0	9	16	2	1	12	1	7	3	1	8
11	6	61	11	19	5000	76	19	57	1	5	7	1	1	4	1	2	1	1	2
12	4	61	12	18	4979	91	22	69	1	5	7	1	1	5	0	2	1	0	6
1	1	62	1	15	4973	90	20	70	0	4	8	1	1	6	0	2	1	0	5
2	5	62	2	19	4836	92	23	69	1	6	8	1	1	6	0	2	1	1	4
3	5	62	3	19	5000	83	24	59	1	6	8	1	1	6	0	2	1	1	5
4	2	62	4	16	4800	122	37	85	1	10	10	1	0	9	0	5	3	1	7
5	7	62	5	21	5000	106	48	58	3	12	11	1	1	8	1	5	5	1	11
6	4	62	6	18	5000	103	49	54	2	14	11	1	1	9	0	5	4	0	13
7	2	62	7	15	4595	75	25	50	0	7	9	1	1	7	0	3	1	0	5
8	6	62	8	20	4845	89	27	62	1	8	10	1	1	8	-0	2	1	1	4
9	3	62	9	17	4950	92	33	59	1	9	11	1	1	9	0	4	2	1	5

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE OREGON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN COLUMBIA RIVER BELOW YAKIMA RIVER

STATION LOCATION COLUMBIA RIVER AT

MCNARY DAM, OREGON 81

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	19	61	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-
11	13	61	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
12	15	61	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-
1	8	62	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-
2	12	62	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
3	12	62	-	-	7.6	-	5	-	-	-	9	88	108	5	-	29	-	-	-
3	19	62	-	-	-	-	-	-	-	-	8	-	-	-	-	33	-	-	-
4	9	62	-	-	-	-	13	-	-	-	-	-	-	-	-	25	-	-	-
4	16	62	-	-	-	-	-	-	-	-	16	64	80	10	-	26	.0	-	-
4	23	62	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-
5	21	62	-	-	-	-	-	-	-	-	5	-	-	-	-	22	-	-	-
6	18	62	-	-	7.9	-	-	-	-	-	7	52	76	5	*25	13	.0	-	-
7	9	62	-	-	-	-	-	-	-	-	4	56	64	5	25	14	-	-	-
7	16	62	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
7	24	62	-	-	-	-	-	-	-	-	3	60	64	5	25	13	.0	-	-
7	30	62	-	-	-	-	-	-	-	-	4	56	68	10	25	16	.0	-	-
8	6	62	-	-	7.8	-	-	-	-	-	9	56	76	5	*25	21	-	-	-
8	13	62	-	-	-	-	7	-	-	-	5	64	76	5	-	17	-	85	-
8	20	62	-	-	79.	-	-	-	-	-	2	64	68	5	*25	13	.0	70	-
8	27	62	-	-	7.8	-	-	-	-	-	3	68	76	5	*25	15	.1	102	-
9	3	62	-	-	-	-	-	-	-	-	5	68	72	5	25	18	.0	100	-
9	4	62	-	-	-	-	-	-	-	-	5	68	82	0	25	19	.0	110	-
9	10	62	-	-	-	-	5	-	-	-	4	-	80	5	25	20	.0	-	-
9	17	62	-	-	-	-	-	-	-	-	7	72	80	10	*25	21	.0	118	-
9	24	62	-	-	7.8	-	-	-	-	-	4	68	84	5	0	20	.0	106	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below McNary Dam, Oregon
Operated by U.S. Geological Survey

STATE Oregon
MAJOR BASIN Pacific Northwest
MINOR BASIN Columbia River below Yakima River
STATION LOCATION Columbia River at
McNary Dam, Oregon

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	78.700	94.800	85.400	71.700	113.000	101.000	113.000	253.000	419.000	286.000	199.000	109.000
2	74.900	87.500	85.700	76.400	115.000	115.000	106.000	244.000	431.000	287.000	202.000	109.000
3	82.900	93.400	85.700	76.800	116.000	120.000	119.000	235.000	430.000	279.000	205.000	108.000
4	85.400	95.900	86.900	75.700	125.000	104.000	121.000	242.000	437.000	271.000	198.000	104.000
5	76.300	90.000	93.800	75.600	118.000	101.000	135.000	249.000	434.000	276.000	200.000	98.300
6	76.100	82.600	95.800	80.400	121.000	85.700	149.000	244.000	420.000	274.000	189.000	104.000
7	75.700	92.200	88.600	75.900	124.000	85.500	186.000	242.000	395.000	274.000	180.000	104.000
8	75.600	89.700	88.200	80.200	122.000	87.600	209.000	244.000	386.000	269.000	177.000	90.000
9	75.700	85.400	86.400	113.000	124.000	87.600	208.000	250.000	370.000	265.000	179.000	85.700
10	75.600	85.500	82.900	130.000	124.000	94.600	195.000	278.000	377.000	257.000	164.000	96.600
11	84.000	85.000	82.700	113.000	124.000	103.000	168.000	288.000	389.000	241.000	159.000	96.400
12	91.000	83.800	87.400	113.000	122.000	92.000	170.000	304.000	402.000	237.000	145.000	90.400
13	90.800	80.700	85.900	112.000	127.000	99.400	159.000	265.000	390.000	230.000	148.000	92.200
14	90.800	85.400	85.700	107.000	126.000	92.100	155.000	280.000	379.000	217.000	142.000	89.200
15	90.400	86.500	84.700	100.000	127.000	87.200	170.000	288.000	380.000	222.000	133.000	92.400
16	80.300	88.700	80.100	96.500	125.000	87.600	189.000	260.000	376.000	223.000	130.000	83.600
17	79.400	101.000	83.400	111.000	126.000	89.200	194.000	255.000	370.000	221.000	131.000	85.900
18	80.900	85.800	81.500	112.000	113.000	85.700	217.000	247.000	374.000	218.000	134.000	98.800
19	89.300	74.900	85.900	115.000	115.000	84.000	239.000	250.000	356.000	217.000	131.000	86.900
20	96.700	74.700	89.200	110.000	115.000	86.000	251.000	254.000	346.000	212.000	121.000	98.500
21	99.200	89.700	89.600	105.000	123.000	107.000	268.000	254.000	345.000	207.000	127.000	88.600
22	91.100	93.400	85.400	103.000	133.000	111.000	264.000	250.000	342.000	198.000	126.000	84.800
23	89.700	88.000	81.600	107.000	125.000	114.000	257.000	258.000	346.000	186.000	138.000	75.300
24	93.800	76.200	81.500	108.000	122.000	113.000	251.000	274.000	340.000	190.000	134.000	75.900
25	95.900	75.700	71.900	113.000	120.000	97.700	252.000	307.000	333.000	188.000	130.000	78.800
26	104.000	83.000	76.300	112.000	117.000	113.000	276.000	350.000	330.000	183.000	128.000	82.000
27	101.000	82.300	75.600	115.000	97.300	127.000	281.000	373.000	319.000	184.000	127.000	93.200
28	104.000	82.600	75.700	117.000	112.000	139.000	276.000	386.000	308.000	180.000	127.000	90.100
29	101.000	75.700	75.600	121.000		147.000	273.000	406.000	302.000	181.000	122.000	89.300
30	95.600	83.800	71.700	121.000		124.000	262.000	417.000	286.000	185.000	119.000	85.800
31	107.000		70.300	115.000		112.000		420.000		192.000	114.000	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE WASHINGTON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN MIDDLE AND LOWER SNAKE RIVER

STATION LOCATION COLUMBIA RIVER AT
PASCO, WASHINGTON

9

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END			TOTAL	CHLOROFORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY							TOTAL	ALIPHATICS	AROMATICS	OXYGENATED COMPOUNDS	LOSS				
10	17	61	10	27	5830	77	18	59	1	4	6	1	0	4	1	2	1	1	3
11	14	61	11	21	4750	56	23	33	1	7	6	1	1	3	1	2	1	1	5
12	12	61	12	20	5130	66	12	54	0	4	4	1	0	3	0	1	1	0	2
1	17	62	1	24	5190	63	12	51	0	4	3	0	0	3	0	1	1	0	3
2	7	62	2	21	5320	90	26	64	2	8	5	0	0	4	1	2	2	0	7
3	13	62	3	24	6380	68	20	48	1	5	7	1	1	5	0	2	1	0	4
4	9	62	4	16	5240	78	22	56	1	6	7	1	1	5	0	2	2	0	4
5	5	62	5	17	3920	104	35	69	1	10	9	1	1	7	0	5	3	1	6
6	8	62	6	24	3720	112	50	62	4	14	10	1	1	8	0	6	4	1	11
7	18	62	7	27	4640	64	29	35	0	8	9	2	1	6	0	4	2	1	5
8	14	62	8	22	4440	84	29	55	1	9	7	1	1	5	0	5	1	1	5
9	5	62	9	15	4000	115	29	86	1	9	8	1	1	6	0	4	2	0	5

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION COLUMBIA RIVER AT
PASCO, WASHINGTON 9

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	27	-	-	-	-	-	-	43	5	604	12	647	13						
10	9	61	10	25	-	-	-	-	-	-	64	7	1065	28	1129	29						
10	16	61	10	31	-	-	-	-	-	-	85	7	641	14	726	16						
10	23	61	11	6	0	1	0	1	0	1	122	7	672	13	794	15						
10	30	61	11	14	-	-	-	-	-	-	65	6	575	13	640	14						
11	6	61	11	21	-	-	-	-	-	-	70	6	383	11	453	13						
11	13	61	11	30	-	-	-	-	-	-	58	6	717	13	775	14						
11	20	61	12	4	-	-	-	-	-	-	78	6	724	14	802	15						
11	27	61	12	8	0	1	0	1	0	1	37	4	925	14	962	15						
12	4	61	12	18	-	-	-	-	-	-	122	7	719	13	841	15						
12	11	61	12	26	-	-	-	-	-	-	86	7	638	12	724	14						
12	18	61	1	9	-	-	-	-	-	-	44	6	356	10	400	12						
12	27	61	1	9	0	0	1	1	1	1	178	7	1551	18	1729	19						
1	2	62	1	18	-	-	-	-	-	-	132	7	986	16	1118	17						
1	15	62	1	29	-	-	-	-	-	-	51	6	602	14	653	15						
1	22	62	2	7	0	1	1	1	1	1	50	5	634	12	684	14						
1	30	62	2	13	-	-	-	-	-	-	48	5	429	11	477	12						
2	5	62	2	20	-	-	-	-	-	-	54	5	676	13	730	14						
2	13	62	2	28	-	-	-	-	-	-	66	6	459	11	525	13						
2	19	62	3	6	-	-	-	-	-	-	62	6	315	10	377	12						
2	26	62	3	13	0	1	1	1	1	1	90	6	344	10	434	12						
3	5	62	3	20	-	-	-	-	-	-	65	6	509	12	574	13						
3	12	62	3	26	-	-	-	-	-	-	54	6	744	14	798	15						
3	19	62	4	4	-	-	-	-	-	-	55	12	543	11	598	16						
3	26	62	4	12	0	0	1	1	1	1	51	5	574	12	625	13						
4	2	62	4	19	-	-	-	-	-	-	163	8	488	12	651	14						
4	9	62	4	27	-	-	-	-	-	-	72	6	237	9	309	11						
4	16	62	6	18	-	-	-	-	-	-	30	6	149	11	179	13						
4	23	62	5	28	0	0	0	0	0	0	194	8	133	8	327	11						
5	7	62	6	19	-	-	-	-	-	-	39	6	124	9	163	11						
5	15	62	6	22	-	-	-	-	-	-	18	3	147	5	165	6						
5	21	62	6	27	-	-	-	-	-	-	41	6	94	8	135	10						
5	28	62	7	3	-	-	-	-	-	-	7168	38	138	8	7306	39						
6	4	62	7	5	0	1	0	1	0	1	17	5	93	7	110	9						
6	11	62	7	17	0	0	1	1	1	1	29	5	102	8	131	9						
6	18	62	7	18	-	-	-	-	-	-	48	5	12	6	60	7						
7	16	62	8	7	-	-	-	-	-	-	14	6	186	10	200	12						
7	23	62	8	21	0	1	0	1	0	1	9	6	116	8	125	10						
7	30	62	8	21	-	-	-	-	-	-	23	5	194	9	217	10						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION COLUMBIA RIVER AT
PASCO, WASHINGTON 9

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	13	62	8	30	-	-	-	-	-	-	45	6	431	13	476	14						
8	20	62	9	7	-	-	-	-	-	-	26	6	299	11	325	13						
8	27	62	9	12	0	0	0	1	0	1	40	5	278	9	318	10						
9	4	62	10	2	-	-	-	-	-	-	49	7	280	10	329	12						
9	17	62	10	15	-	-	-	-	-	-	35	6	57	15	92	16						
9	24	62	10	19	0	1	0	1	0	1	75	5	405	9	480	10						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION COLUMBIA RIVER AT
PASCO, WASHINGTON

9

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	1500	0	20	190	0	100	0	680	540	60	330	69	2	71	1																
10	16	61	1200	0	0	130	0	130	20	500	410	20	480	69	1	71	1																
11	6	61	400	0	0	20	0	0	0	230	190	0	310																				
11	20	61	600	0	0	20	0	0	0	190	440	20	230																				
12	4	61	800	0	0	70	0	0	0	290	430	20	200																				
12	18	61	800	0	0	0	0	50	20	70	650	0	90																				
1	2	62	400	0	0	0	0	0	0	130	310	290	1070																				
1	15	62	700	0	0	90	0	0	0	110	540	20	110																				
2	5	62	1000	50	0	20	0	160	0	230	520	20	160	84	1	92	1	51	1														
2	19	62	900	0	0	0	0	20	0	220	670	180	760	77	1	84	1	69	1														
3	5	62	2000	210	0	20	0	0	0	290	1490	0	230	77	2	88	1	3	1	93	1	92	1										
3	19	62	3100	0	0	0	0	20	0	750	2340	20	330	77	3	71	3	92	2	82	1	81	1										
4	2	62	4000	0	0	0	0	60	60	1040	2860	150	310	77	4	88	3	68	2	92	2	69	1	85	1	81	1						
4	16	62	2900	0	0	130	0	40	0	1140	1560	170	890	71	3	77	3	92	1	81	1												
5	7	62	3200	0	0	0	0	20	0	620	2590	100	210	88	3	73	3	71	2	92	2	81	1	69	1								
5	21	62	11100	20	0	40	0	520	0	1900	8590	250	730	77	5	92	4	69	4	88	4	57	2	82	2	85	2	84	1	87	1	93	1
6	4	62	3700	0	0	0	0	220	0	690	2820	220	890	77	4	69	3	93	2	92	1	57	1										
6	18	62	3300	0	0	0	40	0	0	760	2490	300	760	77	4	69	2	92	1	93	1												
7	2	62	2300	0	0	0	0	0	0	930	1350	170	970	69	3	92	3	93	2	68	1	84	1										
7	16	62	3200	0	20	120	0	0	0	200	2860	200	720	77	4	92	2	93	2	84	1	69	1										
8	6	62	1900	0	0	0	60	40	0	460	1370	0	370	92	3	69	1	77	1														
8	20	62	4100	0	0	0	40	0	0	1120	2900	120	620	92	4	68	3	88	2	69	1	84	1										
9	4	62	200	0	0	110	0	20	0	30	80	80	510																				
9	17	62	400	0	30	190	0	30	0	70	110	180	390																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION COLUMBIA RIVER AT
PASCO, WASHINGTON 009

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																						
														ROTIFERS											CRUSTACEA								NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)								
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	47	21	92	15	58	11	62	10	43	20	0	2											0							0	0
10	16	61	58	22	2	19	62	13	92	10	36	0	0	2											1							0	0
11	6	61	47	12	2	10	62	10	58	9	59	0	0	1											0							0	0
11	20	61	62	19	2	11	71	8	92	7	55	0	0	0											0							0	0
12	4	61	62	16	92	9	71	8	2	6	61	0	0	0											0							1	0
12	18	61	62	20	92	12	2	12	71	6	50	0	0	0											0							0	0
1	2	62	62	17	2	11	92	10	47	5	57	0	0	1											0							0	0
1	15	62	62	20	71	12	2	10	92	8	50	0	0	1											0							0	1
2	5	62	47	19	92	16	62	9	49	8	48	20	0	1											0							0	0
2	19	62	65	13	71	9	9	7	92	6	65	0	0	0											3	50	1					0	0
3	5	62	9	20	95	16	62	14	70	7	43	0	0	2											0							0	0
3	19	62	62	19	45	13	95	9	92	9	50	0	0	1											1							0	0
4	2	62	62	20	92	11	9	10	45	5	54	0	0	4											1							0	0
4	16	62	92	15	62	9	47	8	31	7	61	40	0	2											1							0	0
5	7	62	9	25	61	15	2	10	82	9	41	0	0	0											0							1	0
5	21	62	61	25	9	22	47	27	95	12	14	290	0	5											3							0	0
6	4	62	61	42	47	14	9	12	95	11	21	0	0	8											3	50	1					0	0
6	18	62	95	22	9	20	47	17	61	10	31	0	0	12	11	1									3							0	0
7	2	62	47	28	61	20	95	18	62	9	25	0	0	3											2							1	0
7	16	62	27	18	9	18	95	14	47	11	39	0	0	18	11	1	17	1							2							0	1
8	6	62	47	26	58	18	92	16	9	15	25	0	0	60	11	4	15	1							0							0	0
8	20	62	47	78	27	3	95	3	91	2	14	0	0	57	11	4	2	2							0							0	0
9	4	62	47	45	82	15	62	15	92	7	18	0	0	24	17	1	11	1							3	50	1					0	0
9	17	62	62	36	47	23	58	10	82	8	23	10	0	0											0							0	1

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION COLUMBIA RIVER AT
PASCO, WASHINGTON 9

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	16.0	9.3	8.1	.8	-	.6	1.1	-	-	70	71	8	3	-	-	-	-
10	4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
10	9	61	17.0	9.1	8.2	.6	-	.6	1.1	-	-	68	68	6	3	-	-	-	-
10	10	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64
10	16	61	17.0	9.9	8.2	1.8	-	.6	1.1	-	-	68	70	9	3	17	.1	92	-
10	23	61	15.0	9.7	8.1	1.0	-	.6	.9	-	-	68	69	7	3	8	.0	50	61
10	27	61	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-
10	30	61	15.0	10.0	8.1	.8	-	.6	.8	-	-	70	70	9	3	17	.0	93	28
11	6	61	12.0	10.4	8.2	1.3	-	.6	1.1	-	-	70	74	8	3	14	.0	86	64
11	13	61	13.0	10.2	8.2	.3	-	.6	1.0	-	-	68	70	9	3	-	-	-	91
11	18	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	100	-
11	20	61	10.0	10.4	8.2	1.2	-	.6	.9	-	-	72	74	8	3	9	.0	-	67
11	25	61	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-
11	27	61	10.0	10.6	8.0	1.2	-	.5	.9	-	-	68	76	9	5	-	-	-	-
11	29	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45
12	4	61	9.0	10.7	8.1	1.3	12	.5	1.0	-	5	67	72	8	3	20	-	-	100
12	11	61	7.0	11.1	8.1	1.4	12	.6	.8	-	5	72	76	8	3	17	-	-	210
12	18	61	7.0	10.2	8.1	1.5	12	.6	.9	-	-	68	78	6	2	16	.1	81	60
12	25	61	7.0	11.2	8.1	.6	12	1.0	1.2	-	-	74	80	6	2	-	-	-	-
12	26	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47
12	27	61	-	-	-	-	-	-	-	-	5	-	-	-	-	22	-	-	-
1	2	62	7.0	12.8	8.1	1.4	11	.6	.9	-	5	71	76	8	3	22	-	-	170
1	8	62	7.0	11.4	8.0	1.6	11	.6	.9	-	-	68	73	5	2	-	-	-	-
1	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*3
1	15	62	6.0	12.7	8.0	1.7	10	.7	1.0	-	3	70	72	5	2	19	.0	-	23
1	22	62	3.0	13.2	8.1	2.3	13	.6	.9	-	3	70	74	9	4	23	-	-	-
1	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
1	29	62	5.0	13.2	8.1	2.3	10	1.4	1.6	-	3	72	76	6	2	21	-	-	13
2	5	62	6.0	13.0	8.1	2.2	10	1.3	1.6	-	3	71	76	5	2	-	-	-	33
2	12	62	6.0	11.5	8.1	1.9	7	-	-	-	-	75	78	7	6	-	-	-	-
2	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110
2	19	62	6.0	12.5	8.0	2.0	8	-	-	-	-	79	78	14	16	-	-	-	27
2	26	62	6.0	11.4	8.0	1.9	129	-	-	-	-	79	79	6	6	-	-	-	3
3	5	62	6.0	12.4	8.0	3.6	8	2.3	2.7	.5	-	80	82	7	3	150	.1	-	7
3	12	62	6.0	12.0	8.0	2.8	12	-	-	-	-	80	81	8	4	23	.0	128	*3
3	19	62	7.0	9.9	7.9	1.1	48	2.3	2.4	.2	2	78	86	6	11	15	.1	-	33
3	26	62	8.0	11.2	7.9	1.5	1	2.3	2.5	.6	3	80	84	11	16	23	.2	-	430
4	2	62	8.3	10.9	8.0	2.7	11	-	-	-	2	79	84	11	6	-	-	-	67
4	9	62	8.5	10.2	7.9	1.5	11	2.3	2.6	-	3	79	81	13	10	21	.2	-	91

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION COLUMBIA RIVER AT
PASCO, WASHINGTON 9

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
4	16	62	9.0	9.8	7.9	-	15	-	-	.3	3	78	84	12	7	19	.2	-	10
4	23	62	9.0	9.9	8.2	2.5	13	-	-	-	3	78	82	8	9	-	-	-	13
4	30	62	8.0	10.7	7.9	-	-	-	-	-	-	72	82	24	14	-	-	-	17
5	7	62	9.0	-	8.1	-	-	-	-	-	-	74	80	10	8	-	-	-	-
5	14	62	10.0	10.0	8.1	2.5	-	-	-	-	3	78	82	8	9	20	.1	-	140
5	21	62	12.0	9.5	7.8	2.0	-	-	-	-	4	76	76	14	8	21	-	-	37
6	4	62	12.0	11.8	8.1	1.0	-	1.8	2.0	-	5	65	70	12	16	39	-	-	93
6	11	62	13.5	11.8	8.2	1.0	-	-	-	-	-	62	64	10	9	-	-	-	47
6	18	62	14.5	11.7	8.0	2.3	-	1.7	2.0	-	-	70	66	8	9	-	-	-	16
6	25	62	15.8	12.7	8.1	3.7	25	1.6	1.9	.1	-	65	62	12	9	-	-	-	*330
7	2	62	15.0	10.8	8.2	.8	-	2.0	2.5	-	-	60	68	10	8	-	-	-	33
7	5	62	16.0	10.8	8.1	.8	12	1.8	2.4	.0	-	60	68	10	9	-	-	76	-
7	8	62	15.2	11.0	8.1	1.8	14	1.9	2.8	.1	-	62	66	11	8	-	-	84	-
7	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57
7	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	900
7	16	62	17.5	11.0	8.1	1.7	-	2.1	2.6	-	7	64	70	10	7	22	.0	-	-
7	23	62	18.0	11.1	-	1.7	-	1.8	2.3	-	-	68	68	12	6	-	-	-	3
7	30	62	19.0	10.0	8.2	1.4	-	-	-	-	3	66	67	9	6	12	.0	-	100
8	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
8	6	62	19.0	10.2	8.2	1.0	-	-	-	-	-	66	68	12	35	-	-	-	-
8	13	62	20.0	9.9	8.1	1.0	-	1.8	2.4	-	-	78	66	5	4	16	.0	-	110
8	20	62	18.5	10.4	8.2	.9	-	1.9	2.6	-	-	72	72	10	6	-	-	-	*33
8	27	62	18.0	10.2	8.2	1.4	-	-	-	-	-	68	72	8	6	-	-	-	120
9	3	62	19.0	9.7	-	.9	-	1.6	2.2	-	-	66	70	9	5	-	-	-	-
9	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30
9	10	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
9	17	62	18.5	9.2	8.2	.3	-	1.7	2.0	-	-	64	72	8	6	-	-	-	140
9	24	62	18.3	9.5	8.2	.5	-	1.7	2.0	-	3	66	72	8	5	12	.0	94	73

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Pasco, Washington
Supplied by U.S. Geological Survey

STATE	Washington
MAJOR BASIN	Pacific Northwest
MINOR BASIN	Middle and Lower Snake River
STATION LOCATION	Columbia River at Pasco, Washington

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	58.900	57.200	59.200	48.700	86.500	87.900	52.500	173.000	317.000	234.000	176.000	89.800
2	64.200	72.200	62.200	53.700	87.500	70.900	52.600	172.000	320.000	234.000	184.000	88.600
3	65.100	74.200	60.100	55.600	87.600	64.800	56.700	165.000	319.000	232.000	182.000	83.500
4	60.300	67.100	63.200	59.400	89.000	64.800	58.900	162.000	325.000	238.000	184.000	81.400
5	54.100	64.200	64.100	58.000	93.500	63.900	61.200	160.000	323.000	236.000	175.000	78.400
6	57.800	66.200	60.100	51.500	93.900	63.800	64.400	158.000	305.000	242.000	162.000	78.300
7	58.900	66.200	60.100	49.400	92.600	64.800	79.600	152.000	306.000	239.000	160.000	76.400
8	64.700	64.200	60.100	58.500	91.400	70.800	98.700	165.000	300.000	238.000	154.000	71.500
9	64.500	65.100	53.100	61.400	91.800	70.700	100.000	170.000	294.000	236.000	141.000	70.500
10	67.600	60.200	50.000	60.200	92.600	68.900	98.600	171.000	303.000	219.000	130.000	74.500
11	58.600	57.200	62.000	71.100	91.600	63.800	99.600	170.000	307.000	211.000	121.000	74.600
12	51.600	57.100	71.800	76.800	88.400	73.600	97.500	169.000	300.000	206.000	119.000	71.700
13	54.700	69.100	72.800	73.000	92.200	65.500	97.800	169.000	282.000	196.000	116.000	70.800
14	58.700	70.100	62.800	71.500	90.400	63.400	102.000	175.000	283.000	192.000	110.000	71.900
15	58.400	61.200	60.800	76.100	87.600	59.400	106.000	169.000	280.000	197.000	110.000	68.900
16	60.400	64.100	63.900	80.800	83.800	58.400	105.000	167.000	282.000	197.000	107.000	62.000
17	64.200	60.100	68.100	84.400	83.600	56.400	119.000	160.000	282.000	197.000	107.000	68.000
18	74.100	57.100	63.700	88.200	74.600	56.400	145.000	161.000	268.000	193.000	109.000	67.800
19	82.200	66.000	65.800	88.900	72.400	63.500	143.000	163.000	257.000	193.000	108.000	65.800
20	88.900	71.000	65.800	86.200	76.200	71.600	138.000	164.000	257.000	187.000	107.000	62.700
21	67.800	71.000	54.100	82.600	78.100	77.400	144.000	164.000	259.000	178.000	110.000	61.700
22	64.800	70.000	52.800	84.800	72.900	72.400	152.000	171.000	261.000	172.000	113.000	62.700
23	71.700	61.900	52.400	87.700	73.800	75.500	155.000	178.000	260.000	169.000	115.000	60.700
24	74.600	60.200	50.200	85.700	66.700	68.600	156.000	197.000	258.000	172.000	115.000	65.600
25	76.400	62.400	48.400	86.200	68.500	58.500	165.000	216.000	259.000	166.000	111.000	68.600
26	75.500	66.300	53.200	87.500	74.300	57.800	175.000	239.000	246.000	166.000	109.000	69.600
27	76.400	70.100	52.700	87.900	71.100	55.100	186.000	259.000	242.000	161.000	109.000	69.600
28	78.400	70.100	52.600	89.500	82.900	57.000	178.000	275.000	239.000	165.000	101.000	65.700
29	76.400	64.200	52.400	88.900		55.700	173.000	294.000	234.000	166.000	97.700	57.800
30	74.300	60.200	53.300	88.800		55.500	177.000	302.000	233.000	172.000	95.800	56.000
31	66.300		48.300	89.400		53.400		308.000		183.000	88.900	

Computed as sum of Columbia River at Trinidad, Washington plus Yakima River at Kiona, Washington.

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE WASHINGTON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN COLUMBIA RIVER ABOVE YAKIMA RIVER

STATION LOCATION COLUMBIA RIVER AT
WENATCHEE, WASHINGTON 10

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	4	61	10	11	4117	81	25	56	-	-	-	-	-	-	-	-	-	-	-
11	7	61	11	14	3801	97	27	70	-	-	-	-	-	-	-	-	-	-	-
12	19	61	12	26	4254	64	22	42	-	-	-	-	-	-	-	-	-	-	-
12	19	61		*	12172	80	24	56	1	6	11	5	1	5	0	2	1	1	2
1	30	62	2	6	4162	71	16	55	-	-	-	-	-	-	-	-	-	-	-
2	27	62	3	6	4307	70	17	53	-	-	-	-	-	-	-	-	-	-	-
2	27	62		*	8469	70	16	54	0	4	7	2	1	4	0	2	1	0	2
4	3	62	4	10	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	1	62	5	8	4664	82	36	46	-	-	-	-	-	-	-	-	-	-	-
6	5	62	6	12	3639	88	45	43	-	-	-	-	-	-	-	-	-	-	-
6	5	62		*	8303	84	40	44	1	10	16	7	2	7	0	4	2	0	7
7	17	62	7	31	4814	86	40	46	-	-	-	-	-	-	-	-	-	-	-
9	12	62	9	18	3207	113	35	78	-	-	-	-	-	-	-	-	-	-	-
9	12	62		*	8021	97	38	59	1	8	16	8	2	5	1	5	2	0	6

* FLOW UNKNOWN

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	WASHINGTON
MAJOR BASIN	PACIFIC NORTHWEST
MINOR BASIN	COLUMBIA RIVER ABOVE YAKIMA RIVER
STATION LOCATION	COLUMBIA RIVER AT WENATCHEE, WASHINGTON 10

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	4	61	10	20	-	-	-	-	-	-	1	5	10	6	11	8						
10	11	61	10	30	-	-	-	-	-	-	5	5	3	6	8	8						
10	18	61	10	31	-	-	-	-	-	-	0	5	0	6	0	8						
10	24	61	11	3	0	1	1	1	1	1	4	4	6	4	10	6						
10	31	61	11	11	-	-	-	-	-	-	2	5	0	6	2	8						
11	7	61	11	24	-	-	-	-	-	-	3	5	7	5	10	7						
11	14	61	11	28	-	-	-	-	-	-	1	4	7	5	8	6						
11	21	61	11	30	-	-	-	-	-	-	3	6	4	6	7	8						
11	28	61	12	6	0	1	1	1	1	1	3	4	6	4	9	6						
12	5	61	12	14	-	-	-	-	-	-	4	4	10	4	14	6						
12	12	61	12	21	-	-	-	-	-	-	3	5	4	6	7	8						
12	19	61	12	28	-	-	-	-	-	-	3	5	2	6	5	8						
12	26	61	1	4	0	0	1	1	1	1	1	4	12	4	13	6						
1	2	62	1	11	-	-	-	-	-	-	4	5	8	6	12	8						
1	10	62	1	19	-	-	-	-	-	-	2	6	7	6	9	8						
1	16	62	1	25	-	-	-	-	-	-	18	6	7	6	25	8						
1	23	62	2	2	0	1	0	1	0	1	6	4	8	4	14	5						
1	30	62	2	9	-	-	-	-	-	-	1	5	8	6	9	8						
2	6	62	2	15	-	-	-	-	-	-	6	5	5	6	11	8						
2	13	62	2	27	-	-	-	-	-	-	7	4	9	5	16	6						
2	20	62	3	2	-	-	-	-	-	-	3	4	7	4	10	6						
2	27	62	3	15	0	1	1	1	1	1	0	5	9	7	9	9						
3	6	62	3	19	-	-	-	-	-	-	8	5	7	6	15	8						
3	13	62	3	26	-	-	-	-	-	-	1	5	7	6	8	7						
3	27	62	4	9	0	1	1	1	1	1	7	4	16	5	23	6						
4	3	62	4	16	-	-	-	-	-	-	0	6	9	6	9	9						
4	10	62	4	25	-	-	-	-	-	-	3	5	9	6	12	7						
4	17	62	4	30	-	-	-	-	-	-	2	5	9	6	11	7						
4	24	62	7	18	0	0	2	2	2	2	0	7	6	8	6	11						
5	1	62	6	4	-	-	-	-	-	-	2	6	6	7	8	9						
5	8	62	6	19	-	-	-	-	-	-	5	6	0	6	5	8						
5	22	62	7	25	-	-	-	-	-	-	1	6	6	6	7	8						
5	29	62	6	30	0	0	1	1	1	1	7	3	7	4	14	5						
6	5	62	7	6	-	-	-	-	-	-	1	5	6	5	7	7						
6	12	62	7	10	-	-	-	-	-	-	7	5	11	7	18	9						
6	19	62	7	19	-	-	-	-	-	-	11	6	11	6	22	8						
6	26	62	7	24	0	0	1	1	1	1	6	5	5	6	11	7						
7	17	62	9	21	-	-	-	-	-	-	2	6	3	6	5	8						
7	24	62	9	20	0	0	0	0	0	0	0	5	8	6	8	7						
7	31	62	8	23	-	-	-	-	-	-	3	5	2	5	5	7						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	WASHINGTON
MAJOR BASIN	PACIFIC NORTHWEST
MINOR BASIN	COLUMBIA RIVER ABOVE YAKIMA RIVER
STATION LOCATION	COLUMBIA RIVER AT WENATCHEE, WASHINGTON 10

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	NO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	NO.	DAY	μμc/g	±	μμc/g	±
8	7	62	8	30	-	-	-	-	-	-	5	7	8	8	13	11						
8	14	62	8	30	-	-	-	-	-	-	0	16	36	15	36	22						
8	21	62	9	19	-	-	-	-	-	-	1	5	6	6	7	7						
8	28	62	9	30	0	1	0	1	0	1	10	6	2	6	12	8						
9	4	62	9	28	-	-	-	-	-	-	6	6	11	7	17	9						
9	12	62	10	8	-	-	-	-	-	-	2	6	5	7	7	9						
9	18	62	10	10	-	-	-	-	-	-	1	7	7	7	8	10						
9	25	62	10	22	0	0	0	0	0	0	5	3	11	3	16	4						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER ABOVE YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
WENATCHEE, WASHINGTON 10

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	2400	.0	0	60	0	60	0	1260	1060	60	1200		69	3	84	1	73	1	92	1	88	1										
10	18	61	400	0	0	0	0	40	0	120	190	20	210																					
11	7	61	200	0	0	0	0	0	0	40	120	20	40																					
11	21	61	100	0	0	0	0	0	0	0	110	20	0																					
12	5	.61	00	0	0	0	0	0	0	0	0	60	100																					
12	19	61	100	0	0	0	0	0	0	0	60	0	40																					
1	2	62	1300	0	0	90	0	140	0	160	950	70	70		92	2																		
1	16	62	200	0	0	0	0	0	0	20	190	0	100																					
2	6	62	200	0	0	0	0	20	0	60	170	0	80																					
2	20	62	500	0	0	0	0	0	0	50	500	0	270		77	1																		
3	6	62	300	0	0	0	0	40	0	60	190	0	90																					
3	20	62	900	0	0	0	0	0	0	100	770	0	60		77	3																		
4	3	62	1500	0	0	40	0	0	0	210	1220	0	250		77	3	71	1																
4	17	62	1200	0	0	0	0	0	0	420	820	20	300		71	2																		
5	8	62	6900	20	0	100	20	80	0	1220	5400	80	100		77	5	92	4	88	3	69	3	71	2	84	1	73	1						
5	22	62	5100	0	0	0	0	0	20	1120	3990	630	460		69	3	71	1	92	1	73	1	82	1	81	1								
6	5	62	4300	0	0	0	0	0	0	780	3570	570	1180		77	5	69	2	88	1	92	1												
6	12	62	4700	40	0	0	0	20	60	1370	3170	190	250		77	4	69	3	92	2	93	2												
7	3	62	3700	0	0	20	0	150	0	580	2980	440	520		92	4	93	3	77	1	84	1												
7	10	62	3600	500	40	0	0	40	0	410	2610	210	150		77	4	64	2	93	2	92	1	69	1	68	1								
8	7	62	1400	0	0	100	0	0	0	40	1300	0	290		92	2																		
8	21	62	900	0	0	0	0	0	0	300	630	0	420		84	2	69	1	88	1	92	1												
9	4	62	200	0	0	0	0	0	0	130	80	130	80																					
9	18	62	200	10	0	60	0	0	0	40	120	40	230																					

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER ABOVE YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
WENATCHEE, WASHINGTON 010

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA								
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
10	4	61	62	33	47	17	2	8	92	5	37	0	0	189	15	6	46	1							1							3	1
10	18	61	62	20	58	14	2	10	47	7	49	190	0	28	20	3									0							0	0
11	7	61	2	16	62	16	58	9	93	5	54	0	0	10	15	1									0							0	0
11	21	61	62	25	2	12	70	8	47	8	47	0	0	1											-							-	-
12	5	61	62	25	47	15	95	13	2	7	40	0	0	4											-							-	-
12	19	61	95	39	62	13	71	5	47	4	39	0	0	0											0							0	0
1	2	62	95	12	89	9	91	9	47	8	62	0	0	0											0							0	0
1	16	62	2	11	95	9	62	9	92	6	65	0	0	0											0							0	0
2	6	62	95	32	2	14	9	13	47	6	35	20	0	0											0							0	0
2	20	62	95	41	62	12	9	4	2	4	39	0	0	2											0							0	0
3	6	62	95	43	9	26	61	5	62	3	23	0	0	0											0							0	0
3	20	62	9	29	95	28	92	9	47	5	29	20	0	1											0							0	0
4	3	62	9	45	95	10	47	5	31	4	36	0	0	0											0							0	0
4	17	62	9	24	82	13	95	9	2	8	46	0	0	0											0							1	0
5	8	62	9	37	61	20	89	11	95	11	21	290	0	3											0							0	0
5	22	62	61	32	9	22	95	14	47	10	22	230	0	2											0							0	0
6	5	62	9	31	95	28	61	22	47	4	15	0	0	10	15	1									1							0	0
6	12	62	95	51	61	18	47	12	9	9	10	0	0	6											0							0	1
7	3	62	95	30	61	18	47	14	9	11	27	0	0	2											0							0	1
7	10	62	27	53	28	13	95	10	61	6	18	0	0	19	11	2	15	1							0							0	0
8	7	62	47	34	62	20	92	8	45	7	31	0	0	60	11	4									0							0	0
8	21	62	47	85	62	5	27	2	2	1	7	0	0	57	11	3	13	2	15	1					0							0	0
9	4	62	62	38	82	16	47	11	92	9	26	0	0	0											0							0	0
9	18	62	47	31	62	23	2	10	92	3	33	0	0	81	15	4									0							12	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER ABOVE YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
WENATCHEE, WASHINGTON 10

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	4	61	17.3	-	8.1	-	-	-	-	-	-	53	66	-	-	-	-	91	400
10	11	61	16.5	-	8.0	-	14	-	-	-	6	52	63	0	-	21	.1	87	27
10	18	61	16.1	-	7.8	-	-	-	-	-	-	54	60	5	-	-	-	86	520
10	24	61	14.8	-	7.8	-	-	-	-	-	3	55	66	-	0	14	.0	81	770
10	31	61	14.3	-	8.0	-	-	-	-	-	5	56	66	0	-	14	.4	83	-
11	7	61	12.6	-	8.0	-	-	-	-	-	2	56	67	5	0	10	.1	101	-
11	14	61	12.1	-	7.9	-	-	-	-	-	5	56	67	5	-	16	.2	94	63
11	21	61	10.3	-	7.9	-	-	-	-	-	4	57	68	5	-	17	.3	78	33
11	28	61	9.4	-	7.9	-	-	-	-	-	3	57	68	0	-	12	.1	91	67
12	5	61	9.3	-	7.9	-	-	-	-	-	4	58	69	-	-	20	-	85	640
12	12	61	7.9	-	7.9	-	-	-	-	-	3	58	69	0	-	11	.1	91	93
12	19	61	6.7	-	8.0	-	-	-	-	-	5	60	71	5	-	16	.1	79	53
12	26	61	6.6	-	8.0	-	10	-	-	-	-	59	67	-	-	-	-	86	60
1	2	62	6.0	-	7.9	-	-	-	-	-	-	57	68	-	-	-	-	84	13
1	10	62	5.9	-	7.9	-	-	-	-	-	5	53	64	-	-	24	-	84	-
1	16	62	5.0	-	7.8	-	-	-	-	-	-	58	69	-	-	16	.0	90	33
1	23	62	3.1	-	7.9	-	-	-	-	-	6	55	70	-	-	22	-	89	20
1	30	62	4.7	-	7.8	-	-	-	-	-	6	59	70	5	25	18	.1	92	9
2	6	62	3.8	-	7.9	-	6	-	-	-	3	61	72	-	-	20	-	91	47
2	13	62	3.9	-	7.9	-	-	-	-	-	7	62	75	5	-	27	-	106	6
2	20	62	3.7	-	7.9	-	-	-	-	-	3	64	74	5	-	19	-	91	73
2	27	62	2.5	-	8.1	-	-	-	-	-	5	67	78	0	-	16	-	108	30
3	5	62	2.6	-	8.0	-	-	-	-	-	-	67	78	-	-	-	-	102	-
3	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
3	13	62	3.3	-	8.0	-	-	-	-	-	-	68	79	-	-	-	-	103	30
3	20	62	4.0	-	7.8	-	-	-	-	-	-	64	80	-	-	-	-	100	27
3	27	62	4.2	-	7.5	-	-	-	-	-	4	68	80	5	-	21	-	88	27
4	3	62	5.7	-	7.9	-	-	-	-	-	13	67	75	5	-	230	.1	109	43
4	10	62	5.9	-	7.8	-	6	-	-	-	-	63	76	-	-	-	-	117	33
4	17	62	6.3	-	7.9	-	11	-	-	-	10	68	76	25	-	48	.0	116	34
4	24	62	6.5	-	7.8	-	-	-	-	-	-	66	74	-	-	-	-	70	53
5	1	62	8.1	-	7.9	-	-	-	-	-	6	65	75	0	-	22	-	89	-
5	8	62	9.3	-	7.6	-	-	-	-	-	4	58	70	10	-	23	.0	113	120
5	15	62	10.5	-	8.1	-	-	-	-	-	-	59	66	-	-	-	-	100	13
5	22	62	10.8	-	8.0	-	-	-	-	-	-	55	62	10	-	23	.0	100	33
5	29	62	11.0	-	8.0	-	-	-	-	-	-	55	62	-	-	-	-	122	20
6	5	62	12.0	-	7.9	-	-	-	-	-	-	56	63	-	-	-	-	101	4700
6	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
6	19	62	13.1	-	7.9	-	-	-	-	-	12	57	66	5	*25	39	.3	100	10

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER ABOVE YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
WENATCHEE, WASHINGTON 10

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	26	62	14.3	-	8.0	-	-	-	-	-	-	53	60	-	-	-	-	77	40
7	3	62	14.0	-	8.0	-	-	-	-	-	-	54	60	-	-	-	-	83	*30
7	10	62	15.9	-	7.9	-	-	-	-	-	-	54	62	-	-	-	-	77	-
7	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	73
7	17	62	16.3	-	7.9	-	-	-	-	-	5	55	62	5	25	15	.0	84	7
7	24	62	21.6	-	8.1	-	-	-	-	-	3	54	62	0	25	12	.0	79	290
7	31	62	18.0	-	8.1	-	-	-	-	-	3	55	60	5	25	12	.5	76	110
8	7	62	17.7	-	7.9	-	-	-	-	-	-	51	63	-	-	-	-	91	280
8	14	62	17.2	-	8.1	-	-	-	-	-	2	53	59	0	25	14	.0	72	54
8	21	62	17.5	-	8.2	-	-	-	-	-	3	55	61	0	25	13	.0	80	160
8	28	62	17.6	-	8.1	-	-	-	-	-	6	56	61	10	25	14	.0	78	7
9	4	62	17.6	-	8.1	-	-	-	-	-	-	56	62	-	-	-	-	69	150
9	12	62	16.6	-	7.9	-	-	-	-	-	3	55	63	5	25	-	-	83	-
9	18	62	17.0	-	8.0	-	-	-	-	-	4	56	62	0	25	15	.0	79	39
9	25	62	18.0	-	8.1	-	-	-	-	-	3	55	62	0	*25	14	.0	88	530

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Trinidad, Washington
Operated by U.S. Geological Survey.

STATE	Washington
MAJOR BASIN	Pacific Northwest
MINOR BASIN	Columbia River above Yakima River
STATION LOCATION	Columbia River at Wenatchee, Washington

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	57.000	55.000	57.000	45.000	83.000	85.000	50.000	171.000	312.000	232.000	175.000	88.000
2	62.000	70.000	60.000	50.000	84.000	68.000	50.000	170.000	316.000	232.000	182.000	87.000
3	63.000	72.000	58.000	52.000	84.000	62.000	54.000	163.000	315.000	231.000	180.000	82.000
4	58.000	65.000	61.000	56.000	85.000	62.000	56.000	160.000	321.000	236.000	182.000	80.000
5	52.000	62.000	62.000	54.000	88.000	61.000	58.000	158.000	319.000	234.000	173.000	77.000
6	56.000	64.000	58.000	47.000	88.000	61.000	61.000	156.000	302.000	241.000	160.000	77.000
7	56.000	64.000	58.000	45.000	87.000	62.000	76.000	150.000	303.000	237.000	158.000	75.000
8	62.000	62.000	58.000	54.000	86.000	68.000	91.000	163.000	297.000	236.000	152.000	70.000
9	63.000	63.000	51.000	54.000	87.000	68.000	89.000	168.000	292.000	234.000	139.000	69.000
10	66.000	58.000	48.000	51.000	88.000	66.000	90.000	168.000	301.000	218.000	128.000	73.000
11	57.000	55.000	60.000	63.000	87.000	61.000	93.000	167.000	304.000	210.000	119.000	73.000
12	50.000	55.000	70.000	70.000	84.000	71.000	92.000	166.000	297.000	205.000	117.000	70.000
13	53.000	67.000	71.000	67.000	88.000	63.000	93.000	166.000	279.000	195.000	114.000	69.000
14	57.000	68.000	61.000	66.000	86.000	61.000	98.000	172.000	280.000	191.000	108.000	70.000
15	56.000	59.000	59.000	71.000	83.000	57.000	102.000	166.000	276.000	196.000	108.000	67.000
16	58.000	62.000	62.000	76.000	79.000	56.000	100.000	164.000	278.000	196.000	105.000	60.000
17	62.000	58.000	66.000	80.000	79.000	54.000	114.000	158.000	278.000	196.000	105.000	66.000
18	72.000	55.000	62.000	84.000	70.000	54.000	140.000	159.000	264.000	192.000	107.000	66.000
19	80.000	64.000	64.000	85.000	68.000	61.000	139.000	161.000	252.000	192.000	106.000	64.000
20	86.000	69.000	64.000	83.000	72.000	69.000	134.000	161.000	252.000	186.000	105.000	61.000
21	65.000	69.000	52.000	80.000	74.000	75.000	139.000	161.000	254.000	176.000	108.000	60.000
22	62.000	68.000	50.000	82.000	69.000	70.000	148.000	168.000	257.000	171.000	111.000	61.000
23	69.000	60.000	50.000	85.000	70.000	73.000	152.000	176.000	256.000	168.000	113.000	59.000
24	72.000	58.000	48.000	83.000	63.000	66.000	153.000	195.000	255.000	170.000	113.000	64.000
25	74.000	60.000	46.000	83.000	65.000	56.000	162.000	212.000	256.000	165.000	109.000	67.000
26	73.000	64.000	50.000	84.000	71.000	55.000	172.000	235.000	243.000	165.000	107.000	68.000
27	74.000	68.000	49.000	84.000	68.000	52.000	183.000	254.000	239.000	160.000	107.000	68.000
28	76.000	68.000	49.000	85.000	80.000	54.000	176.000	270.000	236.000	164.000	99.000	64.000
29	74.000	62.000	49.000	85.000		53.000	170.000	289.000	232.000	165.000	96.000	56.000
30	72.000	58.000	50.000	85.000		53.000	175.000	297.000	231.000	171.000	94.000	54.000
31	64.000		45.000	86.000		51.000		303.000		182.000	87.000	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER ABOVE YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
NORTHPORT, WASHINGTON 112

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
5	17	62	6	25	0	0	0	1	0	1	4	5	9	6	13	8						
5	21	62	6	27	0	1	0	1	0	1	1	6	5	6	6	8						
5	28	62	7	3	0	1	0	1	0	1	15	5	13	6	28	7						
6	4	62	7	5	0	0	0	0	0	0	4	6	4	7	8	9						
6	11	62	8	14	0	0	0	1	0	1	8	6	11	7	19	9						
6	18	62	7	23	0	0	0	1	0	1	2	4	2	5	4	6						
6	25	62	7	18	0	0	1	2	1	2	2	5	7	8	9	9						
7	3	62	8	6	-	-	-	-	-	-	10	6	20	7	30	9						
7	16	62	8	17	0	0	0	0	0	0	1	5	10	5	11	7						
7	23	62	8	21	0	0	1	1	1	1	0	7	6	5	6	8						
7	30	62	8	22	0	1	1	1	1	1	0	7	7	5	7	9						
8	6	62	10	3	0	0	0	0	0	0	1	5	12	6	13	7						
8	13	62	8	31	0	0	0	0	0	0	0	5	9	6	9	7						
8	20	62	9	7	0	0	1	1	1	1	12	6	11	8	23	10						
8	28	62	9	18	0	0	1	1	1	1	4	4	11	6	15	7						
9	3	62	9	21	0	0	0	0	0	0	7	5	21	6	28	7						
9	17	62	10	16	0	0	1	1	1	1	0	5	5	5	5	7						
9	24	62	10	17	0	1	0	1	0	1	1	7	14	7	15	10						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER ABOVE YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
NORTHPORT, WASHINGTON 112

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
5	17	62	1800	0	0	40	0	110	0	650	1030	420	300	71	2	92	1																
5	28	62	1400	0	0	0	0	40	60	250	1030	250	340	92	2	93	1																
6	11	62	1300	0	0	20	20	170	20	190	930	20	60	92	1	77	1	93	1	57	1												
6	25	62	2200	0	40	20	0	60	40	1650	420	170	380	71	3	68	2	93	2	89	1												
7	9	62	700	0	0	0	0	0	0	290	370	0	120	68	1																		
7	16	62	300	0	0	0	0	0	0	20	250	0	110																				
8	2	62	600	0	130	80	0	0	60	210	80	0	210	68	1																		
8	14	62	200	0	0	0	0	100	0	0	80	40	0																				
8	28	62	1100	40	340	40	0	40	0	420	210	80	80	71	1	11	1	16	1	68	1												
9	12	62	600	0	0	80	0	40	0	250	210	170	460																				
9	26	62	200	0	0	0	0	0	0	90	130	170	80																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER ABOVE YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
NORTHPORT, WASHINGTON 112

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
5	17	62	95	25	92	13	82	8	45	8	40	210	0	0											1							0	0
5	28	62	95	33	92	17	47	6	46	6	38	0	0	4											4	50	1					0	0
6	11	62	95	60	47	8	45	8	92	7	17	0	0	6											5	50	1					0	0
6	25	62	95	62	82	17	45	3	61	3	15	20	0	3											4							0	0
7	9	62	27	46	95	21	28	13	47	5	15	0	0	2											8	50	2					-	-
7	16	62	30	32	27	32	95	27	47	6	3	0	0	2											4	50	1					0	0
8	2	62	30	49	27	25	47	8	9	3	15	0	0	39	17	3	11	1							3	50	1					0	0
8	14	62	82	42	30	17	2	10	47	4	27	0	0	39	17	3	21	1							3	50	1					0	0
8	28	62	47	60	95	4	58	4	2	4	28	0	0	15	11	1	17	1							0							0	0
9	12	62	47	30	58	22	26	8	57	4	36	0	0	3											0							0	0
9	26	62	56	48	47	26	71	10	58	4	12	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE WASHINGTON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN COLUMBIA RIVER ABOVE YAKIMA RIVER

STATION LOCATION COLUMBIA RIVER AT
NORTHPORT, WASHINGTON 112

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
8	22	62	8	31	5082	60	24	36	0	3	16	2	2	11	1	2	1	1	1

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN COLUMBIA RIVER ABOVE YAKIMA RIVER
STATION LOCATION COLUMBIA RIVER AT
NORTHPORT, WASHINGTON 112

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	23	62	-	-	8.1	-	-	-	-	-	3	96	68	0	*25	13	.0	-	-
8	6	62	-	-	8.0	-	-	-	-	-	2	52	64	0	*25	10	-	93	-
8	20	62	-	-	-	-	-	-	-	-	14	56	64	5	25	17	-	-	-
9	12	62	-	-	-	-	52	-	-	-	-	-	-	-	-	-	-	-	-
9	17	62	-	-	-	-	-	-	-	-	3	56	72	5	*25	16	.1	95	-
9	24	62	-	-	-	-	-	-	-	-	2	60	64	5	*25	15	.1	75	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at International Boundary, Washington
Operated by U.S. Geological Survey

STATE Washington

MAJOR BASIN Pacific Northwest

MINOR BASIN Columbia River above Yakima River

STATION LOCATION Columbia River at
Northport, Washington

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	48.000	53.000	50.000	38.000	40.000	42.000	42.000	135.000	270.000	268.000	153.000	82.000
2	46.000	51.000	44.000	36.000	42.000	42.000	39.000	136.000	272.000	267.000	152.000	76.000
3	44.000	47.000	37.000	35.000	43.000	43.000	37.000	137.000	277.000	260.000	151.000	74.000
4	44.000	46.000	31.000	32.000	46.000	41.000	41.000	137.000	276.000	252.000	154.000	72.000
5	48.000	47.000	33.000	34.000	41.000	45.000	45.000	137.000	273.000	243.000	146.000	72.000
6	52.000	47.000	33.000	36.000	53.000	50.000	49.000	136.000	271.000	235.000	145.000	71.000
7	52.000	43.000	34.000	33.000	52.000	48.000	53.000	137.000	267.000	226.000	144.000	71.000
8	46.000	46.000	36.000	34.000	53.000	48.000	55.000	139.000	260.000	218.000	145.000	67.000
9	45.000	47.000	39.000	35.000	51.000	47.000	55.000	138.000	259.000	213.000	144.000	66.000
10	48.000	46.000	40.000	35.000	51.000	50.000	57.000	135.000	258.000	209.000	137.000	65.000
11	56.000	48.000	37.000	38.000	50.000	47.000	60.000	133.000	256.000	202.000	132.000	65.000
12	60.000	51.000	40.000	37.000	46.000	46.000	61.000	133.000	250.000	199.000	129.000	63.000
13	65.000	51.000	40.000	34.000	45.000	40.000	62.000	134.000	245.000	197.000	127.000	62.000
14	55.000	56.000	35.000	34.000	46.000	38.000	62.000	135.000	244.000	194.000	123.000	63.000
15	47.000	62.000	31.000	32.000	47.000	38.000	65.000	135.000	244.000	192.000	119.000	62.000
16	50.000	56.000	33.000	34.000	49.000	41.000	73.000	133.000	238.000	188.000	117.000	58.000
17	59.000	55.000	33.000	40.000	49.000	42.000	84.000	134.000	236.000	188.000	115.000	58.000
18	75.000	53.000	33.000	36.000	48.000	43.000	84.000	138.000	242.000	187.000	114.000	54.000
19	80.000	53.000	33.000	36.000	46.000	44.000	87.000	145.000	251.000	179.000	112.000	53.000
20	62.000	51.000	36.000	36.000	44.000	47.000	93.000	154.000	254.000	174.000	109.000	58.000
21	61.000	52.000	38.000	37.000	45.000	45.000	98.000	159.000	257.000	168.000	109.000	59.000
22	64.000	53.000	38.000	37.000	47.000	37.000	100.000	165.000	261.000	165.000	109.000	54.000
23	68.000	52.000	39.000	38.000	46.000	35.000	101.000	173.000	264.000	161.000	105.000	51.000
24	60.000	51.000	39.000	40.000	49.000	33.000	110.000	181.000	264.000	161.000	102.000	50.000
25	63.000	51.000	38.000	40.000	48.000	36.000	115.000	192.000	264.000	157.000	103.000	52.000
26	61.000	51.000	37.000	37.000	44.000	43.000	118.000	202.000	266.000	155.000	103.000	53.000
27	60.000	50.000	36.000	37.000	45.000	49.000	121.000	214.000	271.000	154.000	102.000	50.000
28	61.000	51.000	35.000	36.000	43.000	56.000	125.000	230.000	271.000	154.000	101.000	51.000
29	56.000	55.000	34.000	37.000		59.000	128.000	246.000	271.000	155.000	91.000	52.000
30	60.000	53.000	34.000	38.000		56.000	132.000	257.000	270.000	152.000	86.000	51.000
31	56.000		34.000	38.000		48.000		264.000		153.000	84.000	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	CONNECTICUT
MAJOR BASIN	NORTHEAST
MINOR BASIN	CONNECTICUT RIVER
STATION LOCATION	CONNECTICUT RIVER AT ENFIELD DAM, CONNECTICUT 82

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
7	16	62	8	17	1	1	0	0	1	1	8	6	14	8	22	10						
7	25	62	9	12	0	0	0	0	0	0	0	6	8	6	8	8						
8	1	62	9	12	0	1	0	0	0	1	50	6	5	3	55	7						
8	8	62	8	29	0	1	0	1	0	1	4	5	14	6	18	7						
8	15	62	8	31	0	1	0	0	0	1	11	5	14	6	25	8						
8	22	62	9	18	0	0	0	1	0	1	6	6	9	7	15	9						
8	29	62	9	14	0	1	0	1	0	1	8	11	7	7	15	13						
9	5	62	9	20	0	0	0	1	0	1	5	5	13	6	18	7						
9	12	62	10	2	1	0	0	0	1	0	5	6	10	7	15	9						
9	19	62	10	9	0	0	0	1	0	1	16	5	14	6	30	7						
9	26	62	10	24	1	1	0	0	1	1	7	5	10	6	17	8						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE CONNECTICUT
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER AT
ENFIELD DAM, CONNECTICUT 82

DATE OF SAMPLE			ALGAE *(Number per milliliter)*									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED *(Pigmented)*		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
7	16	62	7100	540	20	2670	0	2250	0	900	680	360	270	51	4	32	3	69	3	38	2	9	2	68	2	25	1	35	1	77	1	44	1
8	1	62	7900	270	120	2630	0	2220	100	870	1720	370	210	51	4	69	3	77	3	34	3	38	2	93	2	24	2	31	2	40	1	33	1
8	15	62	14700	1300	0	3380	0	3790	230	4430	1530	580	460	51	5	69	5	68	4	2	3	25	3	34	3	38	2	24	2	3	2	40	1
9	5	62	11200	330	60	2090	0	1700	250	5700	1080	750	540	69	5	68	4	51	4	38	2	71	2	34	2	77	2	73	1	63	1	37	1
9	19	62	2300	0	0	540	0	520	20	920	320	630	560	69	2	51	2	26	1	38	1												
9	26	62	22000	250	550	2070	0	2570	40	16080	460	1770	930	68	7	51	5	69	4	16	2	34	2	92	2	28	1	3	1	24	1	29	1

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE CONNECTICUT
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER AT
ENFIELD DAM, CONNECTICUT 082

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH					NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
7	16	62	56	38	47	29	9	11	95	10	12	180	10	2510	7	8	22	8	2	6	17	6	1	5	145	50	5	51	5	76	3	0	0
8	1	62	56	33	9	21	95	15	47	9	22	0	0	260	11	7	22	7	2	6	7	5	17	4	70	50	4	76	3	51	2	0	0
8	15	62	56	52	58	21	28	6	27	4	17	0	0	716	11	6	17	6	22	4	18	3	21	3	37	50	3	51	3	52	1	0	1
9	5	62	56	65	47	9	3	8	58	3	15	0	0	1540	2	8	11	7	22	6	17	5	15	2	45	51	4	50	2	76	2	3	2
9	19	62	56	57	58	24	57	6	47	5	8	0	0	689	11	7	17	5	22	4	2	3	21	2	67	51	4	52	3	50	3	0	1
9	26	62	56	68	23	9	27	5	58	4	14	0	0	861	11	7	17	5	21	4	22	3	2	3	18	50	3	76	2			-	-

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE CONNECTICUT
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER AT
ENFIELD DAM, CONNECTICUT 82

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
8	9	62	9	5	5639	205	98	107	1	11	56	8	6	41	1	15	5	2	8

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE CONNECTICUT
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER AT
ENFIELD DAM, CONNECTICUT 82

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	16	62	25.0	8.8	7.6	7.3	25	2.0	6.5	.2	11	33	44	-	-	10	.4	113	-
7	25	62	25.0	4.2	7.0	3.2	21	1.0	8.3	.5	9	33	42	-	-	22	.3	80	-
8	1	62	26.0	5.0	7.4	2.1	22	.8	7.9	.6	12	38	46	10	*25	17	.3	83	-
8	8	62	27.0	6.0	7.0	3.2	15	1.7	8.0	.4	14	38	49	-	-	15	.2	85	-
8	15	62	23.0	7.6	7.0	3.4	20	3.9	9.5	.6	11	28	42	-	-	10	.1	56	-
8	22	62	23.5	7.4	7.1	3.6	23	3.1	9.6	.5	11	30	37	-	-	5	.4	84	-
8	29	62	24.0	5.3	6.9	3.1	23	4.1	12.2	.5	10	32	48	20	25	20	.0	88	-
9	5	62	23.5	4.3	7.0	3.4	24	1.8	10.1	.4	11	33	36	-	-	20	.5	82	-
9	12	62	22.5	5.7	6.7	3.4	27	4.3	12.2	.4	13	31	34	-	-	14	.4	74	-
9	19	62	19.0	5.6	6.5	3.5	24	4.9	8.9	.5	11	29	34	-	-	20	.4	77	-
9	26	62	17.0	7.5	6.6	3.7	27	3.7	8.4	.5	10	32	36	-	-	20	.5	75	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Thompsonville, Connecticut
Operated by U.S. Geological Survey

STATE	Connecticut
MAJOR BASIN	Northeast
MINOR BASIN	Connecticut River
STATION LOCATION	Connecticut River at Enfield Dam, Connecticut

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	1.640	3.950	10.200	5.310	9.440	7.840	63.600	38.800	9.760	1.620	9.560	4.480
2	2.500	4.070	9.080	6.660	8.230	7.820	96.000	43.900	10.300	1.950	11.700	2.240
3	5.240	4.550	3.830	9.620	8.980	6.370	89.200	46.800	7.150	2.810	12.500	1.560
4	6.840	3.570	5.280	10.500	4.290	4.830	76.700	48.800	4.680	2.040	8.870	3.230
5	5.920	1.720	8.730	10.300	6.040	5.380	63.700	43.700	7.750	2.320	3.370	4.960
6	5.000	3.890	13.500	7.820	8.440	6.500	54.200	35.800	9.690	2.570	4.050	5.100
7	3.490	9.350	13.300	10.800	8.740	7.000	56.500	29.900	10.200	2.120	6.760	4.750
8	1.810	13.100	14.700	12.900	8.120	6.610	73.600	25.700	10.000	1.480	11.000	2.980
9	3.520	11.200	14.800	12.500	7.890	6.870	88.800	26.300	8.380	1.790	13.800	1.440
10	5.370	10.400	10.100	11.700	8.130	6.580	84.500	24.300	4.340	2.950	13.800	2.190
11	5.860	7.760	6.970	11.300	4.310	5.580	82.800	22.300	4.790	3.270	15.500	4.960
12	3.680	2.960	10.000	10.400	4.770	7.520	80.500	17.900	7.730	2.600	13.300	5.900
13	3.580	4.600	11.800	7.930	6.700	14.300	73.100	13.900	8.700	2.790	5.660	5.460
14	4.000	7.140	13.200	6.450	7.100	13.300	63.200	10.900	6.980	1.440	8.120	5.980
15	3.830	8.080	13.900	6.540	7.390	11.700	54.500	14.600	6.730	1.130	8.300	3.140
16	4.400	8.580	10.600	12.900	6.870	11.900	47.200	18.900	3.820	1.980	9.030	1.300
17	6.330	9.010	4.800	15.300	5.970	12.800	40.800	18.300	1.600	4.300	11.000	2.920
18	6.140	8.560	5.190	15.300	3.830	11.400	35.500	16.800	2.980	5.950	8.310	5.600
19	6.100	3.730	9.910	13.400	5.000	10.100	28.500	15.200	4.680	5.010	3.290	6.960
20	7.120	5.010	11.800	12.700	6.640	12.500	25.700	15.400	5.110	4.060	4.280	5.760
21	5.340	9.820	11.300	10.300	6.710	13.800	28.000	14.600	4.650	3.730	7.600	5.480
22	2.040	9.410	10.200	8.120	6.240	12.800	28.400	15.600	4.650	2.160	9.100	3.390
23	3.250	7.460	9.550	11.000	6.690	12.900	30.400	18.600	3.310	2.790	9.380	1.570
24	5.190	7.630	5.010	10.400	5.420	13.300	33.300	19.000	2.030	5.110	8.120	2.750
25	5.090	13.400	3.850	10.900	4.350	12.500	38.200	18.200	3.210	5.510	3.890	4.890
26	4.960	11.000	5.780	10.500	4.100	14.900	35.100	20.500	4.850	5.260	1.750	5.530
27	4.300	8.470	11.200	11.800	7.700	17.300	31.100	19.600	5.580	5.370	3.460	6.390
28	2.660	9.960	13.100	9.260	8.540	19.800	25.500	18.300	4.250	3.640	5.370	8.500
29	1.640	10.600	12.800	7.940		22.600	26.900	15.800	4.360	1.350	6.380	9.000
30	2.080	10.400	11.000	9.740		30.100	30.800	12.300	3.170	3.900	6.220	3.110
31	4.000		8.730	11.100		45.000		11.400		6.260	5.460	

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Vernon, Vermont
Supplied by U.S. Geological Survey

STATE Massachusetts
MAJOR BASIN Northeast
MINOR BASIN Connecticut River
STATION LOCATION Connecticut River below
Northfield, Massachusetts

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.274	2.630	6.610	1.140	5.100	4.530	67.600	34.200	8.220	.314	8.800	3.120
2	2.720	3.540	1.530	5.910	5.590	4.530	71.200	36.600	6.860	2.860	9.940	1.100
3	3.740	3.810	.464	5.500	2.670	3.200	60.400	39.600	1.140	2.410	8.810	1.280
4	3.710	.512	5.700	5.380	1.350	1.320	48.800	37.400	6.260	.278	4.970	3.200
5	3.170	.283	7.820	5.260	5.550	4.370	40.100	30.500	6.650	2.990	.310	4.200
6	2.640	5.200	9.090	1.520	5.350	4.670	40.000	24.700	7.010	2.950	5.040	4.120
7	.321	6.950	12.500	4.110	5.150	4.570	46.400	21.300	6.920	.487	6.380	4.220
8	.302	7.400	12.600	4.450	4.930	4.370	66.700	20.900	7.000	.267	10.700	.741
9	3.090	7.350	8.450	5.590	5.010	4.670	68.800	20.500	4.040	2.200	9.690	.287
10	3.410	7.700	2.190	7.050	2.900	3.270	65.600	17.300	1.240	2.380	11.500	4.840
11	3.440	1.060	6.010	5.990	1.370	2.190	65.200	13.300	5.170	2.280	13.300	6.740
12	.588	.425	7.300	6.370	5.170	5.630	59.500	12.900	4.850	2.270	1.430	4.750
13	3.780	3.770	7.870	3.080	4.760	6.710	51.300	6.390	5.070	2.140	7.270	5.530
14	.566	5.200	9.550	1.380	5.210	4.450	44.800	9.040	4.940	.250	5.980	5.240
15	.845	4,950	9.270	5.620	4.150	4.580	37.200	13.500	4.110	.285	6.580	.294
16	3.260	5.260	2.650	7.180	4.710	5.060	33.100	13.400	.388	4.430	7.830	.280
17	3.830	5.930	.336	7.700	2.670	5.660	26.700	13.200	.338	5.120	8.350	4.980
18	3.420	1.570	5.520	9.000	1.330	1.390	23.500	10.300	3.650	4.600	4.980	7.200
19	3.740	.432	6.140	8.850	3.990	5.840	17.000	11.300	3.880	4.430	1.160	5.520
20	5.330	6.490	5.500	7.680	4.370	6.410	20.000	12.000	3.640	4.150	5.340	5.550
21	.685	5.800	5.540	3.530	4.560	6.220	20.700	10.200	3.290	2.220	7.240	6.080
22	.298	6.010	6.200	7.050	4.160	5.480	20.700	16.400	3.500	.768	6.730	1.020
23	3.390	1.670	2.320	6.000	4.560	6.030	22.600	15.600	1.880	3.310	7.420	.332
24	3.250	7.350	2.070	6.610	2.670	5.860	29.900	14.200	.858	5.490	5.800	5.320
25	3.140	7.470	1.170	6.350	.590	5.190	29.900	17.700	3.610	4.310	1.650	5.300
26	2.830	2.320	6.720	6.710	5.960	7.980	25.600	16.800	4.100	4.620	.307	4.960
27	2.700	6.040	8.430	5.860	5.160	11.100	21.600	15.500	3.860	4.420	4.480	6.410
28	.350	5.860	7.670	1.050	4.880	11.900	20.200	13.300	4.120	.892	5.760	7.510
29	.285	6.080	6.320	7.020		15.700	23.600	12.000	3.760	.327	4.420	3.060
30	2.440	6.670	5.370	6.640		23.200	26.400	8.440	.556	4.450	4.670	.355
31	2.360		1.190	5.820		35.600		7.570		5.950	4.340	

Computed as sum of Ashuelot River at Hinsdale, New Hampshire plus Connecticut River at Vernon, Vermont.

687-228 O-63—16

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	MASSACHUSETTS
MAJOR BASIN	NORTHEAST
MINOR BASIN	CONNECTICUT RIVER
STATION LOCATION	CONNECTICUT RIVER BELOW NORTHFIELD, MASSACHUSETTS 11

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
NO.	DAY	YR.	NO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	NO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	16	-	-	-	-	-	-	4	6	7	6	11	9						
10	9	61	10	26	-	-	-	-	-	-	7	5	3	5	10	7						
10	16	61	11	1	-	-	-	-	-	-	9	5	16	6	25	8						
10	23	61	11	3	0	0	0	0	0	0	2	4	6	4	8	6						
10	30	61	11	14	-	-	-	-	-	-	5	5	7	6	12	8						
11	6	61	11	21	-	-	-	-	-	-	3	5	17	6	20	8						
11	13	61	11	28	-	-	-	-	-	-	5	5	14	5	19	7						
11	20	61	12	4	-	-	-	-	-	-	3	5	13	6	16	8						
11	27	61	12	8	0	0	0	0	0	0	12	6	22	6	34	9						
12	4	61	12	18	-	-	-	-	-	-	6	6	9	6	15	9						
12	11	61	12	29	-	-	-	-	-	-	16	4	22	5	38	6						
12	18	61	12	29	-	-	-	-	-	-	5	5	14	6	19	8						
12	26	61	1	11	0	0	0	1	0	1	11	4	29	5	40	6						
1	2	62	1	15	-	-	-	-	-	-	16	4	20	5	36	7						
1	8	62	1	24	-	-	-	-	-	-	15	4	14	4	29	6						
1	15	62	1	29	-	-	-	-	-	-	3	6	24	7	27	9						
1	22	62	2	7	0	1	0	1	0	1	11	4	33	5	44	6						
1	29	62	2	13	-	-	-	-	-	-	12	6	23	6	35	8						
2	5	62	2	19	-	-	-	-	-	-	35	6	20	6	55	8						
2	12	62	2	27	-	-	-	-	-	-	7	4	10	4	17	5						
2	20	62	3	7	-	-	-	-	-	-	0	5	8	6	8	8						
2	26	62	3	9	0	0	0	1	0	1	19	4	26	5	45	6						
3	6	62	3	19	-	-	-	-	-	-	24	4	31	5	55	6						
3	13	62	3	26	-	-	-	-	-	-	28	6	24	6	52	8						
3	19	62	4	3	-	-	-	-	-	-	19	6	27	6	46	8						
3	26	62	4	12	0	1	0	1	0	1	7	4	23	5	30	6						
4	2	62	4	19	-	-	-	-	-	-	58	7	23	4	81	8						
4	9	62	4	26	-	-	-	-	-	-	24	7	21	6	45	9						
4	16	62	5	1	-	-	-	-	-	-	6	5	18	6	24	7						
4	23	62	7	18	0	0	0	0	0	0	0	7	7	6	7	9						
4	30	62	6	5	-	-	-	-	-	-	7	6	16	7	23	9						
5	7	62	7	18	-	-	-	-	-	-	7	5	8	5	15	7						
5	14	62	6	22	-	-	-	-	-	-	10	3	17	3	27	4						
5	21	62	6	27	-	-	-	-	-	-	1	6	9	6	10	8						
5	28	62	8	2	0	0	0	0	0	0	3	5	14	5	17	7						
6	4	62	7	5	-	-	-	-	-	-	2	5	7	7	9	9						
6	11	62	7	12	-	-	-	-	-	-	6	6	14	7	20	9						
6	18	62	7	17	0	1	0	1	0	1	1	5	2	6	3	7						
6	25	62	7	25	0	1	0	1	0	1	8	5	14	6	22	7						
7	3	62	8	3	-	-	-	-	-	-	3	3	11	3	14	4						
7	9	62	10	1	-	-	-	-	-	-	3	6	8	6	11	8						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MASSACHUSETTS

MAJOR BASIN NORTHEAST

MINOR BASIN CONNECTICUT RIVER

STATION LOCATION CONNECTICUT RIVER BELOW
NORTHFIELD, MASSACHUSETTS 11

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	16	62	8	2	-	-	-	-	-	-	5	5	16	6	21	7						
7	23	62	8	21	0	0	0	0	0	0	5	5	14	6	19	7						
7	30	62	8	17	-	-	-	-	-	-	6	5	13	6	19	7						
8	6	62	8	23	-	-	-	-	-	-	1	5	11	6	12	7						
8	13	62	8	29	-	-	-	-	-	-	7	5	13	5	20	7						
8	20	62	9	10	-	-	-	-	-	-	3	5	14	5	17	7						
9	4	62	10	1	-	-	-	-	-	-	8	6	12	7	20	9						
9	10	62	10	13	-	-	-	-	-	-	5	5	17	6	22	7						
9	17	62	10	16	-	-	-	-	-	-	1	5	12	6	13	7						
9	24	62	10	22	0	0	0	0	0	0	4	3	14	3	18	4						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MASSACHUSETTS
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER BELOW
NORTHFIELD, MASSACHUSETTS 11

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	8400	100	930	790	0	150	0	5760	660	2090	290	71	8	69	4	16	3	68	3	77	2	38	1	25	1						
10	16	61	4100	0	80	710	0	460	20	2670	210	810	150	69	3	68	3	71	2	38	1												
11	6	61	1400	0	0	50	0	110	0	1070	130	270	130	71	2	68	2	69	1														
11	20	61	700	0	20	0	0	0	0	660	60	0	100	71	1	68	1	69	1														
12	4	61	100	0	0	0	0	20	0	50	70	50	50																				
12	18	61	1500	0	0	0	0	20	0	600	910	60	250	69	2	92	1																
1	2	62	900	0	0	20	0	70	0	230	560	20	50	82	1	92	1																
1	15	62	00	0	0	0	0	0	0	0	20	0	20																				
2	5	62	00	0	0	0	0	0	0	0	20	0	0																				
2	20	62	100	0	0	0	0	20	0	0	90	0	20																				
3	6	62	200	0	0	0	0	0	0	40	150	0	20																				
3	19	62	300	0	0	20	0	0	0	40	230	40	80																				
4	2	62	3000	20	20	0	0	40	20	370	2570	60	640	92	2	82	2	69	2	88	1	82	1	84	1								
4	16	62	200	0	0	40	0	0	0	20	130	20	60																				
5	7	62	600	0	0	20	0	40	0	100	390	0	100																				
5	21	62	4400	0	20	130	20	2980	60	510	700	20	300	51	5	68	2	92	1														
6	4	62	3600	210	190	770	0	460	80	850	1040	100	100	92	2	68	2	51	2	69	2	25	1	3	1	16	1						
6	18	62	6900	930	440	1010	0	2070	190	1510	790	40	170	51	4	68	3	69	2	25	2	16	2	92	2	4	2	5	2	38	1	9	1
7	2	62	28900	18150	1900	2740	0	250	0	2570	3250	460	680	4	7	77	4	17	4	68	4	38	3	69	3	24	2	45	2	93	2		
7	16	62	4600	490	0	2590	0	250	0	250	1040	290	290	32	3	25	2	93	2	77	2	38	2	26	1	3	1	51	1	2	1	40	1
8	6	62	5900	290	0	1260	0	1180	290	2030	870	120	80	69	4	51	3	68	3	25	2	92	1	3	1	38	1	34	1	77	1	87	1
8	20	62	4000	150	0	770	0	1080	460	1140	460	120	80	51	3	68	2	62	2	69	2												
8	28	62	3600	0	0	540	40	1040	250	1160	620	330	290	51	3	69	2	68	2	77	1	60	1	38	1	92	1						
9	17	62	4400	170	0	700	0	1330	120	1100	990	250	250	51	3	88	3	69	2	68	2	38	1	57	1	3	1	77	1				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MASSACHUSETTS
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER BELOW
NORTHFIELD, MASSACHUSETTS 011

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	56	35	82	33	58	13	9	7	12	0	0	19	17	2									81	54	4	98	3	76	3	0	4
10	16	61	56	39	58	29	82	10	23	8	14	0	0	578	11	7	17	6	21	1	46	1			14	54	2	76	1			0	0
11	6	61	56	74	58	8	82	5	47	3	10	0	10	108	11	5	17	1							0							0	0
11	20	61	56	32	58	17	9	12	2	7	32	0	0	12	11	1									0							0	0
12	4	61	2	23	56	15	92	5	58	5	52	0	0	8											1							0	0
12	18	61	92	20	56	18	36	8	45	5	49	0	10	11											2							3	0
1	2	62	36	10	92	10	58	9	56	9	62	70	0	7	11	1									2							0	0
1	15	62	56	14	2	10	92	9	58	7	60	60	10	15	11	2									0							0	0
2	5	62	58	15	92	10	2	7	93	6	62	20	0	8	11	1									0							0	0
2	20	62										0	0	6	11	1									0							0	0
3	6	62	92	25	14	17	31	7	56	6	45	0	0	16	11	2									2							0	0
3	19	62	92	10	56	10	2	9	45	6	65	0	0	3											1							0	0
4	2	62	92	28	56	20	62	7	36	6	39	40	0	1											0							1	0
4	16	62	2	26	92	10	56	8	31	5	51	20	0	0											0							0	1
5	7	62	92	12	14	10	2	9	56	7	62	20	0	3											0							0	0
5	21	62	92	28	2	14	14	12	56	7	39	110	0	13	46	1									0							0	0
6	4	62	92	26	56	24	95	12	2	5	33	120	0	121	11	4	21	3	17	2	46	2	15	1	9	50	2	76	1			3	0
6	18	62	56	45	95	17	47	11	92	11	16	0	0	623	11	7	17	4	1	3	46	3	22	1	32	76	2	50	2			2	0
7	2	62	56	56	95	17	9	15	47	7	5	0	0	121	17	4	22	4	11	3	5	1			66	76	4	51	3	50	3	0	1
7	16	62	95	37	56	22	47	21	9	15	5	0	0	45	11	3	22	1							34	50	3	76	2			0	0
8	6	62	56	46	58	32	92	4	28	3	15	0	0	727	11	6	17	6	21	4	22	3	1	1	23	50	2	51	2			0	0
8	20	62	56	72	57	4	92	3	26	2	19	0	0	192	11	5	17	3	21	3	22	2	15	1	7	50	1	51	1			0	0
8	28	62	56	50	27	7	92	5	58	5	33	0	0	582	11	6	22	5	21	5	17	5	16	2	16	50	2	51	1	76	1	0	3
9	17	62	56	41	70	6	28	5	26	2	46	0	10	532	11	6	17	6	22	3	21	1	18	1	30	73	3	50	2	53	1	0	1

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MASSACHUSETTS
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER BELOW
NORTHFIELD, MASSACHUSETTS 11

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	19.2	9.7	7.5	3.4	24	2.6	7.6	.0	7	42	48	22	9	9	.0	85	3700
10	9	61	18.8	9.0	7.4	2.7	25	3.4	9.9	.0	9	32	40	25	4	13	.1	75	1000
10	16	61	14.0	7.6	7.1	2.0	23	2.9	9.0	.0	15	18	34	25	8	8	.0	85	22000
10	23	61	12.6	8.4	7.2	3.6	26	3.4	8.1	.0	15	34	42	22	12	15	.0	97	7000
10	30	61	12.2	9.2	7.1	2.6	22	4.5	10.4	.0	8	36	44	27	6	13	.1	80	1400
11	6	61	13.2	8.1	7.2	2.9	22	3.3	8.8	.0	16	36	42	27	5	8	.0	99	3700
11	13	61	7.6	9.8	6.9	3.3	24	3.1	9.3	.0	12	26	34	27	8	10	.2	82	32000
11	20	61	6.0	10.5	6.7	2.1	24	2.4	8.8	.1	7	26	42	27	2	21	.3	99	920
11	27	61	5.2	11.5	7.4	3.0	23	4.1	9.0	.1	7	24	32	26	7	8	.3	64	4800
12	4	61	3.0	10.7	7.1	1.7	23	3.1	9.0	.1	7	28	38	26	7	7	.2	81	3700
12	11	61	2.8	11.8	7.2	2.0	25	1.0	10.5	.2	5	30	36	32	4	12	.1	76	1700
12	18	61	1.0	11.7	7.0	3.6	29	1.0	11.3	.2	6	30	36	27	7	10	.1	79	2900
12	26	61	1.0	11.8	7.0	2.1	25	1.0	11.6	.3	7	26	34	28	4	10	.1	78	2300
1	2	62	.4	12.0	7.0	1.6	23	1.0	11.7	.2	9	30	38	26	1	11	.2	77	2900
1	8	62	1.0	11.4	7.0	2.2	26	2.5	12.9	.3	6	28	36	30	4	12	.2	84	3800
1	15	62	.8	11.6	6.9	2.0	24	1.3	12.9	.3	7	28	32	30	4	15	.3	81	4100
1	22	62	1.0	12.0	6.8	1.9	23	1.2	11.5	.2	7	26	38	24	4	11	.2	72	3700
1	29	62	.2	12.4	7.1	2.0	20	1.2	10.4	.2	8	24	36	26	3	10	.2	85	3100
2	5	62	1.0	11.6	6.8	2.8	22	1.2	10.4	.2	10	24	38	25	6	14	.1	96	910
2	12	62	.2	11.5	6.9	1.4	22	1.2	10.4	.2	7	26	36	25	2	11	.1	82	1900
2	20	62	.8	10.7	6.8	1.3	24	1.0	11.3	.3	6	28	36	30	3	14	.2	80	5000
2	26	62	.9	11.4	6.8	2.9	24	1.2	11.6	.2	11	24	34	30	6	11	.2	98	5700
3	6	62	.2	10.7	6.8	2.1	27	5.1	10.4	.2	9	28	36	24	7	9	.1	75	6000
3	13	62	1.0	10.5	6.8	.8	19	4.9	9.7	.3	7	30	38	24	5	11	.1	74	2600
3	19	62	1.2	10.9	6.8	3.1	21	4.6	10.1	.2	11	24	36	23	10	21	.2	86	2000
3	26	62	1.1	11.8	7.0	1.7	20	1.2	10.3	.2	8	24	32	23	7	9	.1	83	2300
4	2	62	1.8	14.6	7.0	3.7	35	4.4	11.1	.2	4	18	22	32	31	10	.1	69	1900
4	9	62	5.0	13.5	7.0	2.1	22	5.1	11.8	.2	3	16	22	27	28	9	.1	48	2600
4	16	62	4.5	13.3	7.0	1.1	20	2.9	10.3	.1	4	18	26	24	24	8	.1	56	1600
4	23	62	8.5	11.7	7.1	1.6	14	2.4	7.2	.0	3	22	26	23	6	6	.1	53	1000
4	30	62	10.8	11.0	7.1	1.3	16	3.5	9.4	.0	3	20	24	24	4	5	.1	56	2700
5	7	62	9.0	11.5	7.3	.8	18	3.1	8.7	.1	3	18	24	27	2	5	.1	50	2600
5	14	62	10.2	9.9	7.2	1.4	37	2.8	7.3	.0	5	18	24	23	3	17	.1	40	1400
5	21	62	18.0	9.5	7.2	2.9	14	2.0	6.1	.0	5	20	28	22	3	10	.1	53	2700
5	28	62	16.0	8.9	7.3	1.2	16	3.4	7.5	.0	4	20	30	24	4	6	.1	60	2000
6	4	62	19.6	8.9	7.2	1.9	16	2.7	6.8	.0	7	24	32	23	4	12	.1	76	3700
6	11	62	21.4	8.6	7.3	2.7	14	2.5	7.1	.0	9	30	34	19	6	10	.1	72	3800
6	18	62	24.8	8.6	7.2	1.8	17	2.7	9.4	.0	9	28	36	18	4	10	.1	70	1800
6	25	62	22.4	8.0	7.3	2.9	16	2.7	6.6	.0	16	32	38	17	4	8	.1	82	3000

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MASSACHUSETTS
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER BELOW
NORTHFIELD, MASSACHUSETTS 11

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	2	62	24.0	8.9	7.3	2.5	21	1.9	7.1	.0	19	30	38	18	14	10	.1	95	280
7	9	62	24.2	8.9	7.6	3.1	18	2.5	7.1	.0	10	36	42	12	8	11	.1	79	200
7	16	62	23.0	7.0	7.2	2.5	20	2.1	7.6	.0	14	30	36	10	22	10	.1	88	2300
7	23	62	24.0	8.1	7.4	2.6	18	2.1	6.9	.0	7	36	46	9	3	22	.1	74	1600
7	30	62	23.2	8.3	7.3	4.9	26	2.7	7.8	.0	15	30	38	12	10	11	.2	100	1200
8	6	62	24.4	8.6	6.8	2.4	20	2.6	8.3	.0	7	32	36	30	10	16	.1	121	880
8	13	62	23.2	7.6	6.8	1.9	23	3.8	-	.1	8	14	24	32	9	11	.2	97	4400
8	20	62	22.0	7.6	7.1	2.8	34	2.9	8.9	.1	16	20	30	32	6	13	.1	86	40
8	28	62	23.0	7.2	6.9	1.1	27	4.8	9.7	.0	6	26	36	45	2	12	.1	105	5900
9	4	62	22.4	7.4	7.0	2.0	26	4.8	9.5	.0	7	26	38	35	3	7	.1	78	1200
9	10	62	21.8	7.7	7.0	3.1	29	4.6	13.5	.0	13	28	32	35	6	10	.1	112	4400
9	17	62	19.5	8.2	7.2	2.0	25	3.6	8.7	.1	10	28	36	35	5	11	.1	85	1200
9	24	62	16.0	8.6	7.2	2.5	29	4.2	9.5	.1	31	26	34	26	19	5	.1	115	*40

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE VERMONT
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER AT
WILDER, VERMONT

103

DATE OF SAMPLE			ALGAE *(Number per milliliter)*									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED* *(Pigmented)*		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
12	29	61	100	0	0	0	0	20	0	0	120	0	40																				
2	12	62	300	20	0	20	0	90	0	70	140	50	20																				
2	23	62	00	0	0	0	0	0	0	0	0	0	50																				
3	9	62	200	20	0	0	0	0	0	60	80	0	0																				
3	23	62	100	0	0	0	0	0	0	20	60	0	0																				
4	6	62	600	0	40	0	0	20	40	20	460	0	80	87	1																		
4	20	62	100	0	0	20	0	0	0	80	0	0	80																				
5	4	62	200	0	0	20	0	20	0	70	70	0	50																				
5	18	62	900	0	0	0	0	530	0	150	190	20	80	57	2																		
6	8	62	400	0	0	0	0	0	0	170	210	170	890	68	1																		
6	22	62	1000	0	0	210	0	150	100	100	500	20	20																				
7	6	62	2000	0	0	230	0	0	20	800	930	380	170	68	2	92	1	87	1	73	1	69	1										
8	3	62	1000	0	0	80	0	40	0	170	660	40	40																				
8	24	62	500	0	0	80	0	0	40	170	210	40	420	68	1																		
9	7	62	100	0	0	40	0	0	0	10	90	30	30																				
9	21	62	100	0	0	20	0	30	0	20	10	30	360																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE VERMONT
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER AT
WILDER, VERMONT 103

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
12	29	61	2	13	92	13	93	9	31	5	60	0	10	34	11	3									0							0	1
2	12	62	92	16	2	13	65	7	82	6	58	20	10	49	11	3	21	1							0							0	0
2	23	62	2	23	92	13	37	9	64	5	50	0	0	32	11	3	10	1							0							0	0
3	9	62	37	13	2	72	92	10	14	8	57	40	0	9	11	1									1							0	0
3	23	62	37	27	2	18	64	4	70	4	47	20	0	7	11	1									1							0	0
4	6	62	64	19	92	15	14	8	65	5	53	0	0	16	11	2									1							0	0
4	20	62	2	18	64	9	92	6	16	6	61	0	0	3											0							0	0
5	4	62	2	19	92	15	65	7	64	6	53	0	0	2											0							1	0
5	18	62	92	14	2	12	64	8	36	4	62	0	0	0											0							1	0
6	8	62	92	40	2	11	64	8	14	6	35	0	0	68											3							1	0
6	22	62	2	22	92	12	35	6	56	5	55	20	0	369	11	6	17	5	5	2	1	1			14	76	1	51	1			0	0
7	6	62	57	21	56	16	9	13	2	6	44	0	10	725	17	7	11	6	21	2	1	2	46	1	86	50	4	51	4	76	3	0	0
8	3	62	2	20	92	7	57	5	27	5	63	0	0	62	11	3									12	50	2	76	1			4	4
8	24	62	2	28	92	13	28	7	57	5	47	0	0	122	11	5	22	1							6	50	1	77	1			0	0
9	7	62	92	12	28	10	2	8	57	7	63	0	0	120	11	5	10	2	17	1	22	1			12	51	2	50	1	76	1	2	1
9	21	62	92	11	95	10	2	9	57	8	62	0	0	2											0							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE VERMONT
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER AT
WILDER, VERMONT 103

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
12	1	61	12	12	0	[illegible]	0	1	0	1	27	5	38	5	65	7						
12	8	61	12	18	[illegible]	[illegible]	0	0	0	1	8	4	22	5	30	6						
12	15	61	12	21	0	0	0	1	0	1	6	4	16	5	22	6						
12	22	61	12	28	0	0	0	1	0	1	9	4	20	5	29	6						
12	29	61	1	5	0	1	0	1	0	1	13	4	21	5	34	6						
1	5	62	1	11	1	2	0	1	1	2	13	7	20	5	33	9						
1	15	62	1	22	0	2	0	2	0	3	4	17	36	15	40	23						
1	22	62	2	6	0	1	0	1	0	1	15	5	33	5	48	7						
1	26	62	2	2	0	1	0	1	0	1	9	4	23	4	32	6						
2	2	62	2	13	0	1	0	1	0	1	4	4	12	5	16	6						
2	12	62	2	23	0	1	0	1	0	1	8	4	13	4	21	6						
2	16	62	2	26	0	1	0	1	0	1	5	4	14	5	19	6						
2	23	62	3	7	0	0	0	1	0	1	5	4	11	4	16	6						
3	2	62	3	16	0	1	0	1	0	1	7	5	13	6	20	8						
3	9	62	3	20	0	1	0	1	0	1	7	5	19	6	26	8						
3	16	62	3	27	0	0	0	1	0	1	4	4	12	4	16	6						
3	23	62	4	3	0	1	0	1	0	1	12	4	27	5	39	6						
3	30	62	4	9	0	0	0	1	0	1	15	6	29	7	44	9						
4	6	62	4	18	0	0	0	0	0	0	15	4	19	5	34	6						
4	13	62	4	24	0	1	0	1	0	1	10	4	21	5	31	6						
4	20	62	5	23	0	1	0	1	0	1	7	5	17	6	24	7						
4	27	62	5	24	0	0	1	1	1	1	5	5	15	6	20	7						
5	18	62	6	22	0	0	0	1	0	1	5	3	10	3	15	4						
5	25	62	6	27	0	0	0	1	0	1	12	6	27	6	39	8						
6	1	62	7	3	0	1	0	0	0	1	11	7	13	6	24	9						
6	8	62	7	5	0	0	0	0	0	0	3	5	12	7	15	9						
6	15	62	7	20	0	0	0	0	0	0	4	4	16	5	20	6						
6	22	62	7	17	0	0	0	0	0	0	0	7	1	6	1	9						
6	29	62	7	25	0	0	1	1	1	1	12	6	14	6	26	8						
7	6	62	8	1	0	0	0	1	0	1	2	7	15	7	17	10						
8	3	62	8	17	0	0	0	0	0	0	11	5	28	6	39	7						
8	10	62	8	23	0	1	0	1	0	1	7	5	18	6	25	7						
8	17	62	9	5	0	0	0	1	0	1	1	3	16	3	17	4						
8	24	62	9	10	0	1	0	1	0	1	8	6	1	7	9	9						
8	31	62	9	19	0	0	0	0	0	0	6	5	20	6	26	7						
9	7	62	9	24	0	0	0	0	0	0	4	6	17	7	21	8						
9	14	62	10	1	0	0	0	1	0	1	2	6	13	7	15	9						
9	21	62	10	15	0	0	1	1	1	1	44	7	7	7	51	10						
9	28	62	10	23	0	1	0	0	0	1	10	5	17	6	27	8						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE VERMONT
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER AT
WILDER, VERMONT 103

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END						ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL			TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS				
12	1	61	12	15	5062	184	51	133	3	13	13	3	2	8	0	6	3	1	12
1	4	62	1	22	5208	294	77	217	5	21	18	2	2	13	1	10	6	1	16
2	12	62	2	26	5030	257	79	178	7	17	17	2	2	13	0	10	8	1	19
3	27	62	4	5	2217	435	155	280	9	36	45	6	4	30	5	30	16	1	18
4	19	62	5	4	5739	196	93	103	2	28	23	3	2	17	1	11	10	1	18
5	25	62	6	8	5009	220	86	134	3	21	17	2	2	12	1	10	8	1	26
6	29	62	7	13	3590	201	107	94	3	36	23	3	2	18	0	13	12	2	18
7	31	62	8	14	5112	255	132	123	4	37	23	2	1	19	1	15	20	1	32
8	31	62	9	14	5118	233	81	152	2	21	20	2	1	17	0	10	10	1	17

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE VERMONT
MAJOR BASIN NORTHEAST
MINOR BASIN CONNECTICUT RIVER
STATION LOCATION CONNECTICUT RIVER AT
WILDER, VERMONT 103

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
12	1	61	-	-	-	-	-	-	-	-	7	20	-	0	-	20	.0	-	-
12	15	61	-	-	-	-	-	-	-	-	8	22	60	5	-	20	-	-	-
12	22	61	-	-	-	-	-	-	-	-	7	24	-	-	-	21	-	-	-
12	26	61	-	-	-	-	-	-	-	-	8	-	76	-	-	26	-	-	-
12	29	61	-	-	7.4	-	-	-	-	-	10	-	80	40	-	63	-	-	-
1	15	62	-	-	-	-	-	-	-	-	5	14	48	-	-	17	.0	73	-
1	22	62	-	-	-	-	27	-	-	-	6	24	-	30	-	20	-	102	-
1	26	62	-	-	-	-	-	-	-	-	8	-	56	-	-	29	-	-	-
2	2	62	-	-	-	-	-	-	-	-	-	-	40	30	-	21	-	100	-
2	12	62	-	-	-	-	-	-	-	-	5	-	-	-	-	18	-	-	-
2	16	62	-	-	-	-	-	-	-	-	9	-	-	80	-	-	-	-	-
2	23	62	-	-	-	-	-	-	-	-	-	-	52	35	0	30	-	-	-
2	26	62	-	-	-	-	35	-	-	-	-	-	-	-	-	-	-	-	-
3	30	62	-	-	-	-	-	-	-	-	10	28	44	25	-	21	.0	-	-
4	5	62	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-
4	6	62	-	-	-	-	-	-	-	-	8	20	32	35	-	18	.0	-	-
4	13	62	-	-	-	-	-	-	-	-	4	18	40	35	-	15	-	-	-
4	20	62	-	-	-	-	-	-	-	-	8	-	-	25	-	22	-	-	-
4	27	62	-	-	-	-	-	-	-	-	4	-	-	10	-	8	-	80	-
5	4	62	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-
5	18	62	-	-	-	-	-	-	-	-	8	36	48	25	25	7	.0	-	-
5	25	62	-	-	-	-	-	-	-	-	6	24	32	30	-	14	.0	-	-
6	8	62	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-	-	-
7	6	62	-	-	7.9	-	-	-	-	-	2	36	64	15	*25	17	.0	100	-
7	13	62	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-
8	10	62	-	-	-	-	-	-	-	-	6	-	-	30	-	18	-	105	-
8	17	62	-	-	-	-	-	-	-	-	7	32	40	20	25	-	-	68	-
9	14	62	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Wilder, Vermont
Operated by U.S. Geological Survey

STATE	Vermont
MAJOR BASIN	Northeast
MINOR BASIN	Connecticut River
STATION LOCATION	Connecticut River at Wilder, Vermont

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.019	1.820	3.600	.480	3.020	3.240	25.000	23.000	5.330	.101	8.770	3.220
2	1.510	2.040	1.010	4.710	3.530	2.830	27.100	24.900	1.820	3.050	8.650	.673
3	2.090	1.540	.066	3.640	1.420	1.350	24.100	23.800	.165	1.910	7.200	.801
4	2.050	.117	3.600	3.400	.392	.150	18.300	19.600	3.910	.106	2.420	2.650
5	1.770	.009	4.560	3.530	2.410	3.350	15.700	14.800	3.900	1.720	.064	2.920
6	1.260	2.830	7.110	2.210	3.540	2.850	16.100	12.700	3.580	1.700	3.910	2.920
7	.017	3.460	9.320	.350	3.350	2.950	18.100	11.600	3.260	.126	5.100	3.280
8	.017	3.990	9.310	2.500	2.720	2.950	29.300	11.200	3.010	.068	9.000	1.240
9	1.710	3.960	3.940	3.270	2.740	2.250	31.300	10.600	1.400	1.470	9.160	.056
10	2.020	3.650	.090	4.040	1.640	1.290	31.800	9.340	.705	1.680	8.730	3.260
11	2.120	.317	4.410	3.940	.190	.130	29.000	8.460	2.980	1.780	6.200	4.560
12	.439	.043	5.010	3.660	3.890	4.510	24.300	3.860	3.260	1.800	.637	4.590
13	2.170	2.610	5.610	.650	3.680	2.680	21.300	.910	3.170	2.030	5.560	4.150
14	.074	3.560	5.480	.070	3.780	2.800	17.800	6.470	2.560	.061	3.980	4.690
15	.177	3.620	4.370	3.800	2.480	2.900	14.500	6.910	3.060	.806	6.260	1.640
16	2.700	3.670	2.330	3.740	2.980	2.890	10.600	5.920	.110	3.800	7.800	1.130
17	3.000	2.860	.330	4.500	1.180	1.340	10.100	4.900	.079	3.460	6.370	3.890
18	2.570	.740	3.360	4.600	.430	.460	9.260	5.340	2.610	3.200	2.690	4.970
19	2.200	.087	4.740	5.220	2.780	2.630	9.880	4.480	2.510	2.740	.785	5.140
20	2.210	4.080	4.450	2.390	2.680	3.380	9.970	1.070	2.560	2.950	4.180	4.620
21	.141	3.910	4.450	1.120	3.080	3.140	9.240	7.150	2.340	2.260	5.640	4.250
22	.558	3.430	3.400	3.890	2.880	2.820	7.520	12.000	2.480	1.030	6.480	1.560
23	2.420	.540	.920	3.970	2.580	3.100	8.220	9.670	1.610	2.750	6.490	.710
24	2.220	3.990	.455	4.180	.970	1.410	13.500	8.670	.654	3.200	5.720	3.410
25	1.940	3.100	.410	3.780	.185	.160	13.800	9.690	2.530	3.270	1.560	3.990
26	2.300	1.140	5.410	3.290	3.790	4.220	11.600	10.000	2.880	3.060	.035	3.590
27	1.790	3.310	5.830	.650	3.280	4.290	10.000	7.640	2.870	3.510	3.080	4.250
28	.053	3.160	5.840	.200	3.370	4.690	13.000	5.700	2.950	.451	3.680	3.920
29	.029	3.650	3.920	4.690		8.110	17.000	5.490	2.440	.022	3.610	2.190
30	2.020	4.320	1.750	4.130		9.800	18.000	2.690	.134	3.580	3.010	.972
31	2.140		.520	4.340		15.200		6.580		6.280	4.810	

Computed as sum of Connecticut River at White River Junction, Vermont minus the sum of White River at West Hartford, Vermont.

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TENNESSEE
MAJOR BASIN OHIO RIVER
MINOR BASIN CUMBERLAND RIVER
STATION LOCATION CUMBERLAND RIVER AT
CLARKSVILLE, TENNESSEE 70

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE		CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	10	61	100	0	0	0	0	50	0	20	0		20	50																				
10	24	61	200	20	0	20	0	0	0	210	0		20	60																				
11	7	61	500	0	0	20	0	20	0	440	0		100	40	69	1																		
11	21	61	400	0	0	20	0	110	0	270	0		160	0																				
12	12	61	3800	50	50	90	0	200	70	2810	500		1010	650	69	4	71	3	68	3														
12	19	61	700	0	0	0	0	40	0	410	270		100	40																				
1	23	62	1500	0	0	0	0	0	0	410	1060		230	210	87	1	69	1	81	1														
2	6	62	300	0	0	0	0	0	0	160	180		50	0																				
9	7	62	200	0	0	40	0	0	0	170	0		0	40																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TENNESSEE
MAJOR BASIN OHIO RIVER
MINOR BASIN CUMBERLAND RIVER
STATION LOCATION CUMBERLAND RIVER AT
CLARKSVILLE, TENNESSEE 070

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	10	61										0	0	7											0							0	0
10	24	61	57	58	82	17	56	9	71	2	14	560	0	8											0							0	0
11	7	61	57	37	82	13	56	9	10	4	37	0	0	4											1							0	0
11	21	61	57	71	82	6	56	6	32	2	15	0	0	1											0							0	0
12	12	61	57	23	92	7	62	6	47	6	58	320	0	3											1							0	0
12	19	61	62	14	57	10	47	9	92	7	60	0	0	1											0							0	0
1	23	62										520	0	0											0							0	0
2	6	62	57	40	56	18	82	12	80	4	26	20	10	3											0							0	0
9	7	62	57	28	82	15	71	11	56	9	37	0	0	26	17	3									0							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	TENNESSEE
MAJOR BASIN	OHIO RIVER
MINOR BASIN	CUMBERLAND RIVER
STATION LOCATION	CUMBERLAND RIVER AT CLARKSVILLE, TENNESSEE 70

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	10	61	10	26	0	0	0	0	0	0	0	4	3	4	3	6						
10	24	61	11	6	0	1	0	1	0	1	1	4	5	4	6	6						
10	31	61	11	15	0	0	0	1	0	1	2	4	6	5	8	6						
11	7	61	11	22	0	0	0	1	0	1	3	5	6	5	9	7						
11	21	61	12	1	0	0	0	1	0	1	4	4	14	5	18	6						
12	12	61	12	19	1	1	0	1	1	1	39	6	34	5	73	8						
12	19	61	12	28	1	1	0	0	1	1	56	6	23	5	79	8						
1	23	62	2	2	4	4	0	1	4	4	47	9	25	5	72	10						
2	6	62	2	19	-	-	-	-	-	-	5	5	7	6	12	8						

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TENNESSEE
MAJOR BASIN OHIO RIVER
MINOR BASIN CUMBERLAND RIVER
STATION LOCATION CUMBERLAND RIVER AT
CLARKSVILLE, TENNESSEE 70

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	10	61	-	-	8.0	-	-	-	-	-	-	-	80	15	-	27	.1	102	-
10	24	61	-	-	-	-	-	-	-	-	-	-	-	-	-	43	.1	100	*10
10	31	61	-	-	-	-	-	-	-	-	5	50	68	5	-	-	-	-	470
11	7	61	-	-	-	-	-	-	-	-	6	50	72	5	0	25	-	-	80
11	21	61	-	-	-	-	-	-	-	-	6	-	68	-	-	22	-	-	60
12	12	61	-	-	-	-	-	-	-	-	7	76	-	5	-	22	.1	-	5700
12	19	61	-	-	-	-	-	-	-	-	5	84	96	-	-	17	-	-	-
1	23	62	-	-	-	-	-	-	-	-	3	-	-	-	-	26	-	-	-
2	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	22	.0	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Dover, Tennessee
Operated by U.S. Geological Survey

STATE	Tennessee
MAJOR BASIN	Ohio River
MINOR BASIN	Cumberland River
STATION LOCATION	Cumberland River at Clarksville, Tennessee

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	8.330	6.670	11.600	24.200	65.800	190.000	105.000	51.600	11.700	15.900	9.380	7.790
2	7.040	6.410	8.570	23.600	58.300	199.000	104.000	52.800	13.700	16.000	11.100	8.790
3	7.250	6.350	7.440	25.900	50.800	186.000	93.700	48.700	16.800	11.900	8.450	9.340
4	9.350	6.860	7.570	26.800	44.000	165.000	81.600	47.300	14.700	9.070	7.550	8.450
5	16.000	6.630	7.630	25.600	38.500	140.000	71.900	43.100	12.100	9.210	8.850	7.960
6	15.800	6.490	10.800	48.200	37.300	120.000	70.600	39.500	12.700	20.200	8.450	7.790
7	11.500	9.310	12.300	69.800	36.800	106.000	85.900	37.600	13.700	20.100	8.180	7.620
8	6.230	13.400	14.200	62.800	35.700	97.700	101.000	33.400	22.500	12.900	11.400	10.200
9	6.170	9.960	20.900	45.900	38.600	102.000	103.000	33.900	16.000	12.400	10.900	10.200
10	7.610	10.700	49.400	36.300	47.100	113.000	99.500	32.300	16.500	15.400	8.390	8.110
11	5.170	10.100	60.100	33.200	47.900	115.000	114.000	31.100	14.900	13.700	8.750	4.840
12	6.020	10.200	48.300	30.700	46.600	109.000	130.000	33.700	21.400	13.000	10.500	3.360
13	5.570	8.610	37.400	31.500	43.900	106.000	139.000	36.700	27.700	14.300	9.020	4.860
14	6.870	8.870	29.000	30.800	40.200	102.000	142.000	36.500	17.400	10.500	8.320	11.400
15	6.930	11.100	21.700	30.900	38.800	95.900	135.000	29.300	19.800	8.010	7.900	8.720
16	5.460	14.000	21.200	38.500	38.800	89.400	123.000	30.700	17.300	10.400	7.830	8.120
17	6.430	14.200	42.800	39.600	47.500	82.400	113.000	28.600	10.600	10.300	7.790	13.000
18	6.550	10.700	63.700	34.400	47.700	81.300	103.000	20.500	9.180	8.610	7.640	9.660
19	6.270	9.860	86.700	30.100	38.200	74.500	95.900	15.300	10.300	8.260	7.620	7.400
20	6.120	8.820	75.700	32.800	33.400	72.100	88.800	15.500	16.300	9.970	7.440	6.380
21	5.940	10.800	49.100	38.700	31.500	83.800	83.900	16.900	23.500	9.280	7.640	6.000
22	6.060	12.200	34.900	43.500	40.600	97.300	74.500	14.400	19.100	7.960	7.620	5.830
23	5.920	12.800	30.300	76.300	42.500	93.300	68.100	8.240	15.800	6.850	7.810	5.870
24	5.800	11.700	28.600	103.000	70.300	86.100	63.000	8.970	16.000	5.870	7.810	5.990
25	5.800	8.690	27.600	110.000	89.600	76.300	58.100	9.300	15.000	6.830	7.440	6.130
26	5.820	9.260	28.100	88.900	99.400	70.300	52.900	9.530	13.600	9.500	8.790	6.510
27	6.230	11.100	28.600	73.500	130.000	78.800	50.900	9.450	11.100	11.800	8.750	6.520
28	5.980	7.630	29.500	70.400	158.000	74.600	50.500	9.860	16.900	10.200	7.830	6.430
29	5.840	9.210	29.500	71.800		67.900	50.800	12.400	18.200	8.550	8.910	6.090
30	6.230	11.400	25.700	71.100		63.700	49.500	13.100	22.700	8.790	8.300	6.110
31	6.570		24.100	68.100		85.500		10.900		7.950	7.750	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE-SCHUYLKILL RIVERS
STATION LOCATION DELAWARE RIVER AT
PHILADELPHIA, PENNSYLVANIA 12

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	16	-	-	-	-	-	-	7	5	6	6	13	8						
10	9	61	10	18	-	-	-	-	-	-	1	5	17	6	18	8						
10	17	61	11	1	-	-	-	-	-	-	15	11	19	15	34	18						
10	23	61	11	1	0	1	0	1	0	1	6	4	13	5	19	6						
2	26	62	3	13	1	1	1	1	2	1	147	8	50	6	197	10						
3	5	62	3	20	-	-	-	-	-	-	72	9	38	7	110	11						
3	12	62	3	26	-	-	-	-	-	-	40	8	45	7	85	11						
3	19	62	4	3	-	-	-	-	-	-	35	7	22	6	57	9						
3	26	62	4	10	0	1	0	1	0	1	8	4	21	5	29	6						
4	2	62	4	13	-	-	-	-	-	-	25	7	21	7	46	10						
4	9	62	4	27	-	-	-	-	-	-	22	6	26	6	48	8						
4	16	62	5	23	-	-	-	-	-	-	8	7	9	7	17	10						
4	30	62	6	6	8	5	0	3	8	6	15	10	6	6	21	12						
5	7	62	6	20	-	-	-	-	-	-	4	7	15	7	19	10						
5	14	62	6	21	-	-	-	-	-	-	3	7	8	7	11	10						
5	21	62	6	27	-	-	-	-	-	-	11	9	5	7	16	11						
5	27	62	6	28	0	0	0	1	0	1	4	6	18	6	22	8						
6	4	62	7	5	-	-	-	-	-	-	8	6	16	7	24	9						
6	11	62	7	18	-	-	-	-	-	-	4	5	13	7	17	9						
6	18	62	7	17	-	-	-	-	-	-	4	10	43	8	47	13						
6	25	62	7	25	1	1	0	0	1	1	10	6	15	6	25	8						
7	2	62	8	3	-	-	-	-	-	-	5	8	4	8	9	11						
7	9	62	8	6	-	-	-	-	-	-	3	6	16	7	19	9						
7	23	62	8	7	0	0	0	0	0	0	10	5	20	7	30	9						
7	30	62	8	21	-	-	-	-	-	-	13	5	4	6	17	8						
8	13	62	8	28	-	-	-	-	-	-	9	6	13	7	22	9						
9	4	62	9	18	0	1	0	0	0	1	7	6	17	8	24	10						
9	6	62	10	8	-	-	-	-	-	-	1	5	12	7	13	8						
9	10	62	10	2	-	-	-	-	-	-	6	6	14	8	20	10						
9	17	62	10	9	-	-	-	-	-	-	5	5	16	7	21	9						
9	24	62	10	22	0	1	0	1	0	1	7	3	11	3	18	4						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE-SCHUYLKILL RIVERS
STATION LOCATION DELAWARE RIVER AT
PHILADELPHIA, PENNSYLVANIA 12

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	1000	0	0	90	0	200	0	690	20	670	340	68	2																		
10	17	61	800	0	0	210	0	80	0	330	170	230	190	68	1																		
11	6	61	1500	40	190	330	0	130	0	680	170	40	100	69	2																		
11	20	61	1000	0	0	170	0	80	0	540	230	20	210	68	2																		
12	4	61	1500	0	0	20	0	60	0	580	790	40	390	67	2	92	2	97	1														
12	18	61	800	0	0	0	0	0	0	250	520	20	190	92	1																		
1	2	62	200	0	20	40	0	0	0	50	110	130	420																				
1	15	62	1000	0	20	80	0	20	0	60	810	60	370	92	1																		
2	5	62	500	0	0	0	0	0	0	130	360	160	630	92	1	77	1																
2	19	62	1500	80	0	0	0	170	130	460	660	20	40	67	1	92	1																
3	6	62	600	0	0	0	0	90	20	40	490	0	110																				
3	19	62	500	0	0	0	20	20	20	50	380	0	110																				
4	2	62	1700	0	20	20	0	40	0	80	1510	20	230	92	2	88	1	87	1														
4	16	62	700	90	0	90	0	0	90	230	160	50	90																				
5	2	62	1300	60	0	250	0	130	40	340	490	340	590	92	1	68	1																
5	21	62	2300	0	130	460	0	130	0	440	1140	840	1080	92	3	68	2	24	1														
6	4	62	3200	480	0	950	0	80	80	770	870	830	370	38	2	68	2	92	2	3	1	2	1										
6	18	62	4700	330	0	1900	0	330	0	1370	750	700	290	38	3	68	3	69	2	92	2	3	1	40	1	51	1	24	1	25	1		
7	2	62	11800	250	0	4750	40	340	0	4260	2110	1310	1480	68	5	26	4	67	3	24	3	38	3	30	2	51	1	25	1	2	1		
7	16	62	5300	420	0	1430	0	300	40	2750	380	680	170	68	4	69	3	26	2	38	2	67	1	2	1	3	1	51	1	41	1		
8	6	62	3400	80	110	1350	0	130	210	1010	460	250	420	68	2	38	2	25	2	67	1	69	1	60	1								
8	20	62	2900	40	0	1220	0	330	80	750	500	120	120	69	2	25	2	51	2	67	2	38	1	24	1	30	1						
9	4	62	1500	40	40	500	0	170	0	330	410	170	40	38	1	68	1																
9	17	62	400	0	0	210	0	20	0	190	10	110	30																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE PENNSYLVANIA

MAJOR BASIN NORTH ATLANTIC

MINOR BASIN DELAWARE-SCHUYLKILL RIVERS

STATION LOCATION DELAWARE RIVER AT

PHILADELPHIA, PENNSYLVANIA 012

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	29	60	58	9	56	7	97	4	20	0	0	155	11	5	16	3	17	1					15	50	2					0	0
10	17	61	29	79	56	5	58	4	19	2	10	0	0	5											1							0	0
11	6	61	29	36	58	18	19	6	56	4	36	0	0	105	11	5	17	1	16	1	2	1			3							0	0
11	20	61	29	46	19	19	92	7	26	6	22	0	0	0											0							0	0
12	4	61	19	36	92	19	29	9	42	8	28	0	0	0											0							0	0
12	18	61	62	21	29	15	92	12	19	12	40	0	0	0											0							0	0
1	2	62	92	21	29	16	36	10	62	9	44	0	0	0											0							0	0
1	15	62	62	25	92	20	36	9	19	7	39	0	0	1											0							0	0
2	5	62	92	19	19	13	36	10	62	10	48	0	0	2											0							2	0
2	19	62										210	0	0											0							0	0
3	6	62	29	11	92	9	62	8	93	8	64	0	0	0											0							0	0
3	19	62	9	11	36	10	92	9	45	6	64	0	0	7											0							4	0
4	2	62	92	13	45	10	31	6	62	5	66	0	0	4											0							3	0
4	16	62	92	13	2	10	31	7	45	5	65	0	0	0											0							0	0
5	2	62	92	40	29	12	62	7	9	3	38	110	0	4											10	76	2					0	0
5	21	62	92	38	26	19	62	5	16	3	35	0	0	26	11	1	21	1	2	1	1	1			15	76	3					0	0
6	4	62	29	47	92	20	62	4	56	3	26	40	0	7											118	51	4	50	4			0	0
6	18	62	26	32	56	25	29	15	97	10	18	40	0	193	2	5	11	4	7	3					9	51	1	50	1			0	0
7	2	62	29	51	56	21	18	13	58	6	9	0	0	101	11	4	16	3	17	1	2	1			5	50	1					0	0
7	16	62	58	57	56	12	29	11	26	10	10	0	0	206	11	5	16	5	15	1					14	50	3					0	0
8	6	62	58	43	56	11	29	9	26	9	28	0	0	69	22	4	11	3	17	3	2	1	16	1	0							0	0
8	20	62	58	28	56	24	19	24	28	7	17	0	0	144	11	5	16	4	17	2					3	51	1					0	0
9	4	62	58	37	28	24	56	8	19	4	27	0	0	90	11	4	20	2	16	1	7	1	17	1	25							0	0
9	17	62	58	41	19	26	26	9	56	9	15	0	0	68	17	3	11	2	16	1	21	1	2	1	12	50	2	51	2			0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE-SCHUYLKILL RIVERS
STATION LOCATION DELAWARE RIVER AT
PHILADELPHIA, PENNSYLVANIA 12

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	10	61	11	21	7073	128	50	78	2	11	20	2	2	15	1	7	3	1	6
12	15	61	12	26	5720	112	39	73	2	8	14	3	1	10	0	5	3	1	6
2	20	62	3	19	6054	88	34	54	1	7	15	2	2	11	0	5	2	0	4
4	17	62	5	1	6872	66	24	42	1	7	7	2	1	4	0	2	3	0	4
5	17	62	5	25	6900	65	30	35	2	9	11	2	1	8	0	3	3	0	2
6	29	62	8	15	5121	167	71	96	2	16	24	5	3	16	0	10	9	1	9
8	20	62	8	27	5811#	269	141	128	3	27	55	5	5	43	2	22	16	3	15

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE SCHUYLKILL RIVERS
STATION LOCATION DELAWARE RIVER AT
PHILADELPHIA, PENNSYLVANIA 12

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	22.8	6.6	7.3	2.6	11	8.4	9.5	.4	9	44	86	5	24	29	.2	-	7000
10	9	61	22.2	6.9	7.3	3.0	13	7.2	8.5	.5	15	44	70	5	72	28	.1	-	16000
10	16	61	18.9	6.6	7.2	2.8	12	7.1	10.3	.3	7	47	74	10	66	29	.2	-	-
10	17	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6000
10	23	61	16.7	7.3	7.1	2.1	11	8.0	11.5	.3	14	42	76	5	62	32	.3	-	20000
10	30	61	13.3	8.2	7.3	3.2	11	6.4	7.8	.7	11	43	76	5	56	27	1.7	-	-
10	31	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13000
11	6	61	18.3	6.4	7.0	2.2	7	7.3	9.5	.5	10	41	78	5	25	38	.6	-	9600
11	13	61	16.1	6.8	7.1	3.9	16	8.2	9.7	1.5	8	40	74	5	85	34	.2	-	-
11	20	61	11.7	5.8	7.1	3.2	14	6.3	8.7	1.5	12	40	68	8	120	33	.3	-	8000
11	27	61	11.7	10.2	7.2	3.6	9	7.0	9.6	.6	13	39	64	5	200	29	1.0	-	7200
12	4	61	10.0	10.6	7.1	2.8	16	5.6	8.3	1.4	9	35	58	7	220	23	.2	-	9200
12	11	61	7.8	11.0	7.0	3.4	12	7.4	9.3	1.4	12	28	50	5	320	29	.2	-	9200
12	18	61	4.4	10.8	6.8	3.2	6	7.1	8.6	2.0	28	37	90	5	180	30	.2	-	130
12	26	61	6.7	12.2	7.2	-	11	6.4	8.9	.4	13	36	66	10	165	32	.2	-	*50
1	2	62	5.0	12.0	7.1	2.7	11	6.1	7.6	.8	10	31	64	5	210	28	.3	110	*20
1	8	62	5.6	12.7	7.2	2.1	32	7.1	10.2	1.1	9	32	60	5	150	26	.3	100	-
1	15	62	1.7	13.0	7.2	2.0	14	4.0	7.6	.6	8	20	50	5	80	23	.2	140	4600
1	22	62	3.9	11.2	7.2	2.7	11	5.1	6.7	1.4	9	24	46	5	60	24	.2	130	-
1	29	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2800
1	30	62	5.0	12.6	7.2	2.7	7	4.9	6.6	.6	9	30	52	5	70	24	.3	140	-
2	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32000
2	12	62	1.1	12.2	7.3	2.9	10	5.2	8.4	1.9	16	35	60	3	210	29	.3	110	-
2	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11000
2	19	62	2.8	12.2	7.2	2.6	6	2.2	4.0	2.3	11	37	58	6	220	18	.3	140	-
2	26	62	3.0	11.6	7.2	3.0	12	4.6	8.8	1.6	13	39	66	8	140	26	.3	200	8200
3	5	62	2.8	12.6	7.2	3.3	15	3.9	7.2	.9	7	32	54	8	160	29	.3	180	-
3	12	62	3.0	12.2	7.2	4.1	11	5.8	8.9	4.5	10	35	56	8	120	36	.3	140	6400
3	19	62	4.0	11.8	7.2	4.0	11	6.8	9.1	2.0	9	27	46	18	100	23	.3	190	3000
3	26	62	12.3	9.0	7.1	4.8	10	7.3	9.1	.3	10	23	54	18	50	37	.3	120	4700
4	2	62	12.0	10.6	7.2	4.4	10	7.0	8.0	2.5	6	26	46	18	80	19	.3	130	-
4	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4400
4	9	62	12.3	10.6	7.1	4.0	9	6.4	8.3	.7	7	23	44	25	95	25	.2	130	5600
4	16	62	10.5	11.2	7.1	3.4	8	6.0	7.9	1.4	10	24	56	18	65	22	.4	160	3200
4	23	62	11.0	10.4	7.3	4.4	9	5.9	8.3	1.3	9	29	52	5	85	28	.3	150	5200
4	30	62	12.8	8.0	7.2	5.5	10	6.2	8.9	.8	8	33	50	8	80	32	.2	160	7600
5	7	62	14.0	7.8	7.2	4.6	16	7.8	9.0	.7	9	36	60	8	65	38	.3	220	-
5	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4100
5	14	62	16.0	7.2	7.2	5.1	8	7.7	9.2	1.6	8	36	56	8	115	26	.4	140	400

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE SCHUYLKILL RIVERS
STATION LOCATION DELAWARE RIVER AT
PHILADELPHIA, PENNSYLVANIA 12

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
5	21	62	19.3	6.2	7.2	5.3	9	8.8	10.2	.1	7	44	64	7	70	36	.3	180	-
5	28	62	21.0	4.8	7.1	6.0	11	9.0	11.1	1.5	5	43	64	18	55	23	.3	170	-
6	4	62	23.0	3.4	7.1	7.8	15	8.0	10.0	1.4	13	44	78	23	55	28	.3	130	-
6	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	770
6	11	62	23.3	4.0	7.3	6.3	9	8.6	11.0	.7	13	50	76	8	50	37	.2	180	-
6	18	62	23.0	4.2	7.1	5.6	12	9.2	11.7	1.4	15	47	68	20	55	32	.4	160	-
6	25	62	25.0	3.0	7.3	6.6	13	10.0	12.8	1.1	11	48	70	25	33	36	.8	100	3500
7	2	62	25.2	4.8	7.3	5.0	7	8.8	10.2	1.1	14	48	68	25	50	32	.4	220	-
7	9	62	25.0	5.4	7.2	4.8	12	9.1	11.9	1.0	16	47	72	15	40	31	.3	170	-
7	10	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*70
7	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
7	19	62	27.0	5.2	7.2	6.2	20	2.4	7.8	.5	9	49	78	12	40	32	.3	108	-
7	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
7	26	62	25.0	6.0	7.2	5.5	12	2.6	8.4	.9	14	54	70	13	50	33	.3	120	-
7	31	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500
8	2	62	23.9	5.8	7.2	4.9	9	.2	6.4	.7	17	49	76	17	40	34	.2	119	-
8	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2400
8	9	62	25.8	5.0	7.2	5.0	12	3.0	6.6	1.0	10	53	80	13	30	30	.3	122	-
8	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4000
8	16	62	23.9	5.8	7.3	4.4	13	3.0	6.8	1.1	11	46	80	13	31	34	.2	116	-
8	21	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2300
8	23	62	23.2	4.0	7.1	3.8	13	3.6	8.2	1.2	13	45	76	20	25	29	.4	96	-
8	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2000
8	30	62	23.9	5.8	7.1	4.9	13	2.8	7.4	1.1	11	43	80	14	70	34	.2	100	-
9	4	62	24.2	4.0	7.0	4.0	9	3.2	7.2	.6	15	39	106	8	30	28	.2	91	7700
9	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1500
9	13	62	22.0	5.4	7.1	3.9	12	3.0	7.9	1.3	11	42	80	20	30	30	.3	101	-
9	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
9	20	62	21.8	5.6	7.2	3.9	17	2.5	6.8	1.5	10	42	84	15	35	26	.5	111	-
9	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	870
9	27	62	19.3	5.0	7.5	2.8	17	2.2	7.0	.8	15	43	72	18	30	31	.5	91	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Trenton, New Jersey
Operated by U.S. Geological Survey

STATE	Pennsylvania
MAJOR BASIN	North Atlantic
MINOR BASIN	Delaware-Schuylkill Rivers
STATION LOCATION	Delaware River at Philadelphia, Pennsylvania

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	3.170	2.630	6.650	5.220	7.000	24.100	31.400	9.000	3.320	2.810	2.220	2.790
2	2.960	3.200	5.900	4.900	6.880	16.400	58.600	9.900	3.410	2.690	2.320	3.380
3	3.080	2.690	5.700	4.560	5.980	13.900	51.000	11.000	3.720	2.510	2.380	3.420
4	3.080	2.690	5.140	4.560	6.140	13.200	39.900	10.300	3.470	2.450	2.320	2.510
5	3.140	3.020	4.740	5.620	6.700	11.100	25.900	9.500	3.290	2.320	2.320	2.260
6	3.170	3.290	4.700	5.980	6.800	10.000	21.200	8.450	4.040	2.300	2.400	2.380
7	2.990	3.590	4.630	22.600	7.160	9.260	20.200	7.700	4.420	2.320	3.050	2.630
8	2.930	5.900	4.380	36.200	6.840	8.550	30.100	7.040	3.620	2.280	3.960	2.480
9	2.900	5.780	4.350	39.300	7.000	8.600	48.100	7.160	3.260	2.280	4.100	2.380
10	2.870	4.980	4.490	26.200	7.000	8.700	40.500	7.400	3.200	2.200	4.460	2.260
11	2.840	4.630	4.420	19.600	6.400	9.380	32.500	7.000	3.050	2.150	4.780	2.080
12	2.750	4.140	4.600	14.100	5.020	21.800	26.700	6.800	3.230	2.510	4.100	2.140
13	2.750	3.320	5.500	11.600	4.740	35.400	25.800	6.550	3.960	2.280	3.380	2.410
14	2.900	3.200	5.940	10.500	5.060	28.500	24.300	5.820	4.420	2.320	3.230	2.290
15	2.840	3.720	5.140	9.100	5.420	30.100	23.300	5.180	4.100	2.570	2.780	2.230
16	2.870	5.140	4.520	12.800	5.140	28.400	21.300	5.500	3.790	2.480	2.750	2.290
17	2.990	6.100	3.820	19.200	4.940	21.300	19.100	5.580	3.500	2.280	2.720	2.600
18	2.720	6.550	5.260	18.600	5.060	18.800	17.400	5.580	3.290	2.250	2.690	2.260
19	2.810	5.940	8.500	13.500	5.100	17.300	16.000	5.700	3.110	2.380	2.690	2.350
20	2.750	5.660	9.320	11.200	4.660	16.600	15.400	5.340	3.170	2.600	2.570	2.920
21	2.990	4.980	11.100	9.950	4.560	18.000	15.000	4.700	3.200	2.570	2.480	2.510
22	3.110	4.780	11.000	8.700	4.740	26.100	13.800	4.320	3.170	2.450	2.600	2.320
23	2.900	4.660	10.000	9.380	4.980	25.300	12.800	4.180	2.630	2.570	3.020	2.290
24	2.660	4.980	8.500	10.000	11.900	26.700	12.000	4.420	2.810	3.170	2.720	2.200
25	2.600	8.450	8.000	10.800	15.000	25.400	11.700	4.560	3.260	3.320	2.480	1.960
26	3.110	9.560	7.300	10.300	14.000	22.600	11.300	4.460	3.290	2.870	2.380	1.910
27	3.080	11.500	6.700	9.320	26.300	21.400	10.200	4.040	3.200	2.630	2.350	2.480
28	2.900	9.500	6.600	10.500	27.200	21.100	9.740	3.530	3.320	2.570	3.440	2.980
29	2.960	8.400	7.080	9.850		20.700	9.200	3.380	3.110	2.420	3.410	4.700
30	2.630	7.300	6.550	9.620		19.800	8.850	3.230	2.840	2.320	3.930	5.580
31	2.540		5.820	8.300		21.200		3.230		2.300	3.290	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW JERSEY
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE RIVER - ZONE #2
STATION LOCATION DELAWARE RIVER AT
TRENTON, NEW JERSEY 100

DATE OF SAMPLE			TOTAL	ALGAE (Number per milliliter)								INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
				BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
11	27	61	10000	0	60	560	0	40	0	3170	6210	20	2400	69	5	92	4	73	4	88	3	68	2	87	2	81	2	38	2	82	1	84	1
12	18	61	200	0	0	0	0	0	0	0	190	0	0																				
1	2	62	400	0	0	0	0	0	0	90	290	20	250																				
1	15	62	800	0	70	70	0	70	0	20	590	20	160																				
2	5	62	800	0	0	0	0	70	0	90	610	0	0	77	1	92	1																
2	19	62	300	0	0	0	0	40	20	0	200	20	110																				
3	5	62	1700	0	0	40	40	40	80	120	1330	40	330	92	2	84	1																
3	19	62	1400	0	20	0	20	0	0	60	1260	0	410	84	1	92	1																
4	2	62	13300	0	40	40	80	210	80	910	11920	330	2190	92	6	82	3	81	3	84	3	87	3	91	2	69	2	73	2	68	2		
4	16	62	600	0	0	20	0	360	50	0	160	20	420	57	2																		
5	7	62	9800	0	40	540	60	720	130	1040	7270	100	1410	92	6	68	3	51	3	88	2	81	2	25	1	71	1	77	1				
5	21	62	33700	1650	1860	14010	20	1100	250	9120	5740	1980	6200	68	6	40	5	71	5	38	5	92	4	17	4	2	4	81	4	24	4	45	4
6	11	62	171000	720	5440	131240	0	1770	0	24140	7640	6160	8150	40	8	24	8	38	8	68	8	44	7	17	6	45	5	30	5	31	5	92	5
6	18	62	81100	2190	4140	49120	0	550	630	13630	10800	4260	9750	38	7	68	7	24	7	40	6	88	5	17	5	92	5	30	5	45	4	71	4
7	2	62	18500	250	550	11180	0	1010	250	1600	3630	460	1820	38	6	40	5	88	4	68	4	92	3	30	2	17	2	51	2	31	2		
7	16	62	20100	250	0	11530	40	2650	80	870	4720	460	790	38	6	88	5	51	5	25	4	40	4	29	3	68	3	73	2	92	2	44	2
8	6	62	6000	70	0	2050	0	540	20	500	2880	290	1820	88	4	25	3	40	2	51	2	87	2	68	2	92	1	31	1	26	1		
8	20	62	22000	330	120	7780	0	10490	80	910	2280	170	580	51	7	38	6	68	3	88	3	25	3	40	3	87	2	35	2	3	1	92	1
9	4	62	8100	210	0	4430	0	410	0	540	2530	120	790	38	4	88	4	44	3	51	2	68	2	25	2	40	2	3	1	79	1	92	1
9	17	62	2100	0	0	1600	0	20	0	70	360	90	2000																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW JERSEY
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE RIVER - ZONE #2
STATION LOCATION DELAWARE RIVER AT
TRENTON, NEW JERSEY 100

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
11	27	61	62	43	92	16	2	10	70	3	28	0	0	1											0							0	0
12	18	61	62	22	92	15	45	11	31	5	47	0	0	2											1							0	0
1	2	62	92	13	2	11	62	10	70	7	59	20	0	8											1							0	2
1	15	62	2	14	62	10	92	9	93	9	58	380	0	7	11	1									0							0	1
2	5	62	92	14	93	13	9	10	2	8	55	410	0	2											0							1	0
2	19	62	93	13	92	12	36	10	9	8	57	200	0	2											1							0	0
3	5	62	93	13	92	9	16	7	36	6	65	80	0	5	11	1									0							0	0
3	19	62	45	15	31	9	93	9	2	9	58	40	0	4											0							0	1
4	2	62	92	35	62	17	36	8	31	4	46	120	0	2											0							0	0
4	16	62	2	24	93	9	92	8	31	6	53	0	0	7											0							0	3
5	7	62	92	76	45	5	31	4	70	2	13	2070	10	11	15	1	6	1							1							1	0
5	21	62	92	24	31	23	2	8	26	6	39	250	0	43	6	2	15	2	11	1					3							6	5
6	11	62	27	27	92	21	2	10	62	7	35	40	0	33	2	1	6	1	15	1	22	1			0							0	0
6	18	62	26	18	92	15	62	11	70	11	45	0	0	21	2	1	15	1							0							0	0
7	2	62	92	21	70	20	70	15	26	13	31	0	0	90	2	4	22	2	20	2					1							0	1
7	16	62	70	34	70	14	92	8	2	6	38	40	0	36	18	2	20	2							1							0	1
8	6	62	70	31	70	22	64	9	26	6	32	0	0	130	15	4	13	3	2	2	18	1	22	1	2							0	0
8	20	62	26	20	70	18	64	9	62	7	46	0	0	21	15	2	22	1							1							3	2
9	4	62	70	24	64	14	16	7	62	5	50	0	0	28	15	3									0							6	0
9	17	62	64	35	71	20	16	8	70	4	33	0	0	24	15	2	22	1							0							0	*

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEW JERSEY
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE RIVER - ZONE #2
STATION LOCATION DELAWARE RIVER AT
TRENTON, NEW JERSEY 100

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
11	20	61	11	30	0	0	0	1	0	1	7	5	31	6	38	8						
11	27	61	12	6	2	2	0	1	2	2	75	8	42	6	117	10						
12	4	61	12	12	0	1	0	1	0	1	7	4	16	5	23	6						
12	18	61	12	29	0	1	0	1	0	1	40	5	29	5	69	7						
12	26	61	1	3	0	0	0	1	0	1	28	5	27	5	55	7						
1	2	62	1	17	0	0	0	0	0	0	7	4	15	5	22	6						
1	8	62	1	16	1	2	0	1	1	2	94	9	34	6	128	12						
1	15	62	1	24	0	1	0	1	0	1	16	4	18	5	34	7						
1	30	62	2	8	0	1	0	1	0	1	62	9	29	5	91	10						
2	5	62	2	13	0	0	0	1	0	1	24	5	19	5	43	7						
2	13	62	2	20	0	0	1	1	1	1	22	4	19	5	41	6						
2	19	62	3	1	0	0	1	1	1	1	18	4	29	5	47	6						
2	26	62	3	12	1	1	0	1	1	1	207	7	121	7	308	10						
3	5	62	3	19	0	0	0	1	0	1	23	4	34	5	57	6						
3	12	62	3	22	1	1	0	1	1	1	69	7	37	5	106	9						
3	19	62	3	29	1	1	0	1	1	1	33	5	22	5	55	7						
3	26	62	4	19	-	-	-	-	-	-	26	6	17	6	43	8						
4	2	62	4	12	4	2	1	1	5	2	74	8	21	5	95	13						
4	9	62	4	23	1	1	0	1	1	1	41	7	27	6	68	9						
4	16	62	4	30	0	1	0	0	0	1	10	4	19	5	29	6						
4	23	62	5	29	0	1	0	1	0	1	12	5	24	6	36	8						
4	30	62	5	25	0	1	0	1	0	1	7	7	20	8	27	10						
5	7	62	6	8	0	0	0	0	0	0	4	5	15	6	19	7						
5	14	62	6	18	2	1	1	1	3	1	1	5	11	6	12	7						
5	21	62	6	22	0	1	0	0	0	1	3	3	13	4	16	5						
5	28	62	6	30	1	1	1	1	2	1	8	3	13	4	21	5						
6	11	62	7	11	1	2	0	1	1	2	0	12	7	8	7	14						
6	18	62	7	16	0	1	0	0	0	1	9	6	7	7	16	9						
6	25	62	7	18	0	1	0	1	0	1	6	5	120	9	126	10						
7	2	62	8	3	0	0	0	1	0	1	0	10	10	7	10	12						
7	9	62	8	10	0	0	0	0	0	0	3	3	8	3	11	4						
7	16	62	8	7	0	0	0	0	0	0	6	5	13	6	19	7						
8	6	62	8	23	0	0	0	1	0	1	1	6	7	7	8	9						
8	13	62	8	23	0	1	1	1	1	1	4	5	13	6	17	8						
8	20	62	9	5	0	1	0	1	0	1	0	3	4	3	4	4						
8	27	62	9	11	0	1	0	1	0	1	2	6	14	7	16	9						
9	4	62	9	19	0	0	0	0	0	0	0	7	9	6	9	9						
9	10	62	9	24	0	0	0	0	0	0	4	6	7	7	11	9						
9	17	62	10	10	0	0	1	1	1	1	4	5	18	7	22	8						

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW JERSEY
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE RIVER ZONE #2
STATION LOCATIONDELAWARE RIVER AT
TRENTON, NEW JERSEY 100

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
11	20	61	9.0	-	7.6	-	-	-	-	-	5	36	52	25	10	15	.2	-	-
11	27	61	8.0	-	7.3	-	-	-	-	-	4	28	50	60	56	30	.3	-	3700
12	4	61	5.0	-	7.2	-	-	-	-	-	7	29	50	25	6	20	.3	-	130
12	11	61	4.0	-	7.7	-	-	-	-	-	-	42	54	15	6	17	-	-	2400
12	18	61	3.0	13.2	7.2	-	53	-	-	-	10	33	60	25	13	20	1.1	-	7400
12	26	61	2.0	12.2	7.5	-	28	-	-	-	6	28	44	15	2	15	.4	-	400
12	27	61	-	12.2	-	1.9	3	-	-	-	-	-	-	-	-	-	-	-	-
1	2	62	2.0	13.1	7.1	-	9	-	-	-	-	35	46	15	4	20	-	-	140
1	8	62	4.0	-	7.5	-	-	-	-	-	10	37	70	200	205	55	-	-	4700
1	10	62	-	12.7	-	2.9	5	-	-	-	-	-	-	-	-	-	-	-	-
1	15	62	2.0	-	7.4	-	-	-	-	-	12	29	64	20	10	31	.3	-	1700
1	17	62	-	11.8	-	3.2	10	-	-	-	-	-	-	-	-	-	-	-	-
1	22	62	2.0	-	7.4	-	-	-	-	-	10	40	40	20	7	-	.3	-	1300
1	24	62	-	15.3	-	6.4	-	-	-	-	-	-	-	-	-	-	-	-	-
1	29	62	3.0	-	7.1	-	-	-	-	-	-	13	44	15	7	20	-	-	440
1	31	62	-	12.4	-	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-
2	5	62	3.0	-	7.5	-	-	-	-	-	8	36	60	15	4	26	.3	-	-
2	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	570
2	7	62	-	11.9	-	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-
2	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	490
2	14	62	-	10.4	-	.5	2	-	-	-	-	-	-	-	-	-	-	-	-
2	15	62	1.0	-	7.4	-	-	-	-	-	8	32	54	15	7	15	.5	-	-
2	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400
2	21	62	-	12.1	-	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-
2	28	62	-	11.5	-	6.5	-	-	-	-	-	-	-	-	-	-	-	-	-
3	5	62	3.5	12.3	7.5	3.3	-	-	-	-	15	32	66	20	111	20	4.2	125	3000
3	12	62	6.5	11.8	7.3	3.9	2	-	-	-	8	29	50	40	33	30	1.2	140	600
3	19	62	5.0	11.4	7.1	1.9	-	-	-	-	12	32	48	20	13	25	.5	-	1500
3	26	62	7.0	11.0	7.2	1.9	3	-	-	-	10	32	48	25	17	20	.1	-	1500
4	2	62	10.0	-	7.3	-	-	-	-	-	4	21	-	110	80	-	1.0	78	3100
4	4	62	-	11.8	-	2.8	6	-	-	-	-	-	-	-	-	-	-	-	-
4	9	62	9.0	11.7	7.2	2.5	-	-	-	-	30	18	30	35	30	30	.4	-	5400
4	16	62	8.0	11.4	7.3	1.8	10	-	-	-	5	29	44	20	10	16	.8	60	680
4	23	62	13.0	-	7.4	-	13	-	-	-	21	33	42	20	10	-	.6	-	640
4	30	62	20.0	-	7.7	2.1	9	-	-	-	20	40	72	15	8	23	.2	-	820
5	7	62	18.0	10.0	7.4	1.0	15	-	-	-	4	36	46	20	6	30	.3	-	1300
5	14	62	16.0	7.8	8.6	4.6	18	-	-	-	8	42	52	20	6	40	.1	110	300
5	21	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16000
5	28	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2800

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW JERSEY
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE RIVER ZONE #2
STATION LOCATION DELAWARE RIVER AT
TRENTON, NEW JERSEY 100

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	4	62	24.0	7.1	8.5	2.0	29	-	-	-	5	48	66	40	14	35	.5	130	17000
6	14	62	21.5	8.2	7.5	2.7	15	-	-	-	20	62	64	45	23	-	1.0	-	-
6	18	62	25.0	6.4	8.2	1.6	17	-	-	-	-	43	70	40	10	45	.2	-	170
6	25	62	25.0	10.3	7.7	1.7	-	-	-	-	10	50	110	0	*25	28	.0	136	3700
7	2	62	25.0	-	7.6	-	-	-	-	-	10	48	88	5	*25	27	.0	125	120
7	9	62	25.0	10.1	8.8	5.0	23	-	-	-	12	50	66	25	8	44	.6	84	*20
7	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*20
8	13	62	-	-	-	-	-	-	-	-	8	48	-	5	25	-	-	99	-
8	20	62	-	-	-	-	-	-	-	-	9	-	-	5	25	-	-	100	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Trenton Water Works Intake
Operated by U.S. Geological Survey

STATE New Jersey
MAJOR BASIN North Atlantic
MINOR BASIN Delaware River-Zone 2
STATION LOCATION Delaware River at
Trenton, New Jersey

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	3.170	2.630	6.650	5.220	7.000	24.100	31.400	9.000	3.320	2.810	2.220	2.790
2	2.960	3.200	5.900	4.900	6.880	16.400	58.600	9.900	3.410	2.690	2.320	3.380
3	3.080	2.690	5.700	4.560	5.980	13.900	51.000	11.000	3.720	2.510	2.380	3.420
4	3.080	2.690	5.140	4.560	6.140	13.200	39.900	10.300	3.470	2.450	2.320	2.510
5	3.140	3.020	4.740	5.620	6.700	11.100	25.900	9.500	3.290	2.320	2.320	2.260
6	3.170	3.290	4.700	5.980	6.800	10.000	21.200	8.450	4.040	2.300	2.400	2.380
7	2.990	3.590	4.630	22.600	7.160	9.260	20.200	7.700	4.420	2.320	3.050	2.630
8	2.930	5.900	4.380	36.200	6.840	8.550	30.100	7.040	3.620	2.280	3.960	2.480
9	2.900	5.780	4.350	39.300	7.000	8.600	48.100	7.160	3.260	2.280	4.100	2.380
10	2.870	4.980	4.490	26.200	7.000	8.700	40.500	7.400	3.200	2.200	4.460	2.260
11	2.840	4.630	4.420	19.600	6.400	9.380	32.500	7.000	3.050	2.150	4.780	2.080
12	2.750	4.140	4.600	14.100	5.020	21.800	26.700	6.800	3.230	2.510	4.100	2.140
13	2.750	3.320	5.500	11.600	4.740	35.400	25.800	6.550	3.960	2.280	3.380	2.410
14	2.900	3.200	5.940	10.500	5.060	28.500	24.300	5.820	4.420	2.320	3.230	2.290
15	2.840	3.720	5.140	9.100	5.420	30.100	23.300	5.180	4.100	2.570	2.780	2.230
16	2.870	5.140	4.520	12.800	5.140	28.400	21.300	5.500	3.790	2.480	2.750	2.290
17	2.990	6.100	3.820	19.200	4.940	21.300	19.100	5.580	3.500	2.280	2.720	2.600
18	2.720	6.550	5.260	18.600	5.060	18.800	17.400	5.580	3.290	2.250	2.690	2.260
19	2.810	5.940	8.500	13.500	5.100	17.300	16.000	5.700	3.110	2.380	2.690	2.350
20	2.750	5.660	9.320	11.200	4.660	16.600	15.400	5.340	3.170	2.600	2.570	2.920
21	2.990	4.980	11.100	9.950	4.560	18.000	15.000	4.700	3.200	2.570	2.480	2.510
22	3.110	4.780	11.000	8.700	4.740	26.100	13.800	4.320	3.170	2.450	2.600	2.320
23	2.900	4.660	10.000	9.380	4.980	25.300	12.800	4.180	2.630	2.570	3.020	2.290
24	2.660	4.980	8.500	10.000	11.900	26.700	12.000	4.420	2.810	3.170	2.720	2.200
25	2.600	8.450	8.000	10.800	15.000	25.400	11.700	4.560	3.260	3.320	2.480	1.960
26	3.110	9.560	7.300	10.300	14.000	22.600	11.300	4.460	3.290	2.870	2.380	1.910
27	3.080	11.500	6.700	9.320	26.300	21.400	10.200	4.040	3.200	2.630	2.350	2.480
28	2.900	9.500	6.600	10.500	27.200	21.100	9.740	3.530	3.320	2.570	3.440	2.980
29	2.960	8.400	7.080	9.850		20.700	9.200	3.380	3.110	2.420	3.410	4.700
30	2.630	7.300	6.550	9.620		19.800	8.850	3.230	2.840	2.320	3.930	5.580
31	2.540		5.820	8.300		21.200		3.230		2.300	3.290	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE PENNSYLVANIA

MAJOR BASIN NORTH ATLANTIC

MINOR BASIN DELAWARE-LEHIGH RIVERS

STATION LOCATION DELAWARE RIVER AT

MARTINS CREEK, PENNSYLVANIA 61

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	4	61	10	14	-	-	-	-	-	-	3	4	4	4	7	6						
10	11	61	10	25	-	-	-	-	-	-	3	5	6	5	9	7						
10	18	61	10	31	0	0	0	0	0	0	2	4	5	4	7	6						
10	25	61	11	6	-	-	-	-	-	-	8	6	4	6	12	8						
11	1	61	11	13	-	-	-	-	-	-	4	4	5	4	9	6						
11	8	61	11	22	-	-	-	-	-	-	5	5	11	5	16	7						
11	15	61	11	27	-	-	-	-	-	-	2	5	27	6	29	8						
11	22	61	12	4	0	1	0	0	0	1	10	4	19	5	29	6						
11	29	61	12	6	-	-	-	-	-	-	33	6	28	6	61	8						
12	6	61	12	14	-	-	-	-	-	-	6	5	17	5	23	7						
12	13	61	12	22	-	-	-	-	-	-	14	6	26	6	40	8						
12	20	61	12	29	0	1	0	1	0	1	18	4	25	5	43	6						
12	27	61	1	8	-	-	-	-	-	-	17	5	24	6	41	8						
1	3	62	1	15	-	-	-	-	-	-	2	5	7	5	9	7						
1	10	62	1	22	-	-	-	-	-	-	24	6	31	6	55	8						
1	17	62	1	25	0	1	0	1	0	1	67	7	54	5	121	8						
1	24	62	2	1	-	-	-	-	-	-	14	6	28	6	42	8						
1	31	62	2	12	-	-	-	-	-	-	19	6	34	6	53	8						
2	7	62	2	20	-	-	-	-	-	-	9	5	23	6	32	8						
2	14	62	2	27	-	-	-	-	-	-	14	6	16	6	30	8						
2	21	62	3	7	0	1	0	1	0	1	6	4	14	5	20	6						
2	28	62	3	13	-	-	-	-	-	-	97	8	73	7	170	11						
3	7	62	3	20	-	-	-	-	-	-	25	6	39	7	64	9						
3	14	62	3	29	-	-	-	-	-	-	35	7	29	6	64	9						
3	21	62	4	2	0	1	0	1	0	1	6	4	21	4	27	6						
3	28	62	4	12	-	-	-	-	-	-	6	6	10	4	16	7						
4	4	62	4	16	-	-	-	-	-	-	20	5	18	4	38	6						
4	11	62	4	23	-	-	-	-	-	-	13	6	12	5	25	7						
4	18	62	5	1	0	0	0	1	0	1	5	4	15	5	20	6						
5	2	62	6	4	-	-	-	-	-	-	7	7	16	7	23	10						
5	9	62	6	20	-	-	-	-	-	-	2	6	11	7	13	9						
5	16	62	6	21	-	-	-	-	-	-	2	6	14	7	16	9						
5	23	62	6	26	0	0	0	0	0	0	4	5	11	6	15	8						
5	29	62	7	30	-	-	-	-	-	-	15	3	18	3	33	4						
6	6	62	7	5	-	-	-	-	-	-	4	5	8	7	12	9						
6	13	62	7	10	-	-	-	-	-	-	10	5	17	7	27	9						
6	20	62	7	17	1	1	0	0	1	1	0	5	7	5	7	7						
6	27	62	7	23	-	-	-	-	-	-	6	5	6	6	12	7						
7	3	62	8	3	-	-	-	-	-	-	4	4	7	4	11	6						
7	11	62	8	13	-	-	-	-	-	-	1	4	6	4	7	6						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE-LEHIGH RIVERS
STATION LOCATION DELAWARE RIVER AT
MARTINS CREEK, PENNSYLVANIA 61

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
7	18	62	8	10	0	0	0	0	0	0	2	6	12	6	14	8						
7	25	62	8	21	-	-	-	-	-	-	6	5	17	6	23	7						
8	1	62	9	20	-	-	-	-	-	-	1	5	11	6	12	7						
8	8	62	8	27	-	-	-	-	-	-	1	3	4	3	5	4						
8	15	62	8	30	-	-	-	-	-	-	3	6	10	6	13	8						
8	22	62	9	9	0	0	0	0	0	0	3	4	9	4	12	6						
8	29	62	9	14	-	-	-	-	-	-	1	6	7	7	8	9						
9	5	62	10	1	-	-	-	-	-	-	5	6	9	7	14	9						
9	12	62	10	8	-	-	-	-	-	-	3	6	9	6	12	8						
9	19	62	10	10	1	1	0	0	1	1	8	6	12	6	20	8						
9	26	62	10	22	-	-	-	-	-	-	0	4	51	3	51	5						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE-LEHIGH RIVERS
STATION LOCATION DELAWARE RIVER AT
MARTINS CREEK, PENNSYLVANIA 61

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	200	0	20	70	0	0	20	0	130	0	20																				
10	16	61	100	0	40	20	0	0	0	0	60	0	100																				
11	6	61	500	0	20	60	0	20	0	150	290	0	60																				
11	20	61	1200	110	20	90	0	110	0	250	590	70	470																				
12	4	61	400	0	40	20	0	20	0	40	290	40	230																				
12	19	61	600	0	0	0	0	20	0	120	410	20	100																				
1	3	62	500	0	0	0	0	0	0	70	450	0	20	92	1	82	1																
1	15	62	400	0	50	70	0	0	20	20	270	0	160																				
2	5	62	300	0	0	20	0	20	0	0	220	0	180																				
2	19	62	400	0	0	0	0	20	40	20	340	0	270																				
3	5	62	1700	20	20	40	0	0	0	80	1510	0	230	84	1	92	1																
3	19	62	600	0	0	0	20	0	0	0	570	0	140																				
4	4	62	500	0	20	0	0	0	40	20	410	20	100	92	1																		
4	16	62	500	20	0	20	20	20	50	0	320	0	20																				
5	7	62	2700	0	0	60	0	350	60	620	1570	40	100	92	2	81	2	68	2	71	2	88	1	51	1								
5	21	62	8600	0	80	1940	0	170	0	4790	1670	480	890	68	5	38	3	40	2	81	2	87	2	71	2	88	1	44	1	73	1	51	1
6	4	62	14200	0	0	7950	0	710	70	4980	450	1630	1680	68	6	24	4	40	4	38	3	37	3	44	3	27	2	44	2	45	2	25	2
6	18	62	19200	10270	0	6170	0	910	120	700	1040	410	830	3	7	31	4	44	3	51	3	38	3	25	3	35	2	37	2	40	2		
7	3	62	1900	60	0	760	0	0	0	250	800	80	510	38	2	68	1	40	1	92	1	88	1										
7	16	62	400	0	0	120	0	0	0	120	190	60	80																				
8	6	62	500	0	0	160	0	0	0	170	210	40	380																				
8	20	62	800	150	0	330	0	40	0	0	250	0	0	40	1																		
9	4	62	500	0	0	20	0	80	60	0	370	0	0																				
9	17	62	1700	80	40	170	0	80	0	170	1160	40	370	88	2	87	1																

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE-LEHIGH RIVERS
STATION LOCATION DELAWARE RIVER AT
MARTINS CREEK, PENNSYLVANIA 061

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	2	26	64	14	70	8	16	7	46	0	0	0											0							0	0
10	16	61	2	22	64	13	70	9	32	6	50	0	0	1											1							0	0
11	6	61	2	18	64	14	32	6	62	5	57	0	0	15	20	1	13	1							0							2	0
11	20	61	2	17	82	15	64	14	70	7	47	110	0	0											0							0	0
12	4	61	64	14	2	12	92	10	36	7	57	0	0	8											0							0	0
12	19	61	62	17	65	14	92	14	36	12	43	0	0	4											0							1	0
1	3	62	92	22	36	21	90	8	64	5	44	0	0	5											0							0	0
1	15	62	92	15	64	11	2	8	16	8	58	20	0	8	11	1									2							0	0
2	5	62	93	22	92	16	9	9	2	5	48	0	0	2											1							1	0
2	19	62	93	22	9	17	92	13	37	8	40	0	0	4											0							0	0
3	5	62	45	17	92	9	93	9	31	8	57	40	0	2											1							0	0
3	19	62	45	17	93	11	31	8	62	7	57	0	10	3											0							0	0
4	4	62	92	18	93	8	16	6	45	5	63	60	0	1											0							0	0
4	16	62	93	18	2	15	31	7	16	6	54	0	0	1											0							0	2
5	7	62	92	25	31	21	70	9	2	6	39	0	0	1											0							0	0
5	21	62	27	36	31	16	65	6	26	4	38	190	0	15	11	2									1							2	2
6	4	62	27	23	2	17	31	13	93	4	43	110	0	1											0							0	1
6	18	62	26	24	31	14	16	9	92	8	45	170	0	10	15	1									0							0	0
7	3	62	92	17	70	12	26	10	62	10	51	0	0	9											0							0	2
7	16	62	45	16	2	12	64	11	16	8	53	0	0	19	20	2									1							0	0
8	6	62	64	12	70	11	45	11	2	8	58	0	0	28	15	1	13	1							2							4	6
8	20	62	64	22	45	12	16	8	70	7	51	20	0	87	20	4	22	1							3	50	1					0	1
9	4	62	64	13	45	12	16	9	71	7	59	0	0	23	15	2	46	1							0							0	1
9	17	62	64	13	70	10	16	9	46	9	59	0	0	1											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE-LEHIGH RIVERS
STATION LOCATION DELAWARE RIVER AT
MARTINS CREEK, PENNSYLVANIA 61

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	11	61	10	27	5390	173	46	127	1	11	17	3	2	12	0	7	2	1	7
11	1	61	11	20	5965	185	57	128	7	15	12	1	1	10	0	6	4	1	12
12	5	61	12	26	6578	183	50	133	1	13	13	1	1	11	0	7	4	1	11
12	26	61	1	2	1254	284	40	244	1	12	11	2	1	8	0	5	2	1	8
5	7	62	6	11	4200	191	112	79	1	17	31	2	2	25	2	12	7	1	43
6	11	62	6	28	5310	152	83	69	2	17	30	4	2	23	1	10	5	1	18
7	20	62	8	7	5960	162	76	86	2	17	29	4	2	22	1	10	5	2	11
8	16	62	8	30	4770	153	55	98	1	16	16	1	1	13	1	6	4	1	11
9	18	62	10	4	5390	169	75	94	2	22	16	1	1	14	0	8	7	2	18

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE LEHIGH RIVERS
STATION LOCATION DELAWARE RIVER AT
MARTINS CREEK, PENNSYLVANIA 61

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	4	61	15.6	8.8	7.6	.8	8	.8	1.8	.1	2	29	40	19	21	11	.0	56	880000
10	10	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*100
10	11	61	17.8	8.9	7.5	.4	6	1.0	2.0	.1	3	26	35	18	19	12	.2	53	-
10	18	61	13.2	9.9	7.7	.9	4	1.0	2.1	.1	2	26	40	16	18	11	.0	54	-
10	25	61	12.2	10.5	7.7	.1	11	1.0	2.0	.1	2	23	44	31	33	10	.1	50	-
11	1	61	14.8	9.5	7.8	.8	11	1.0	2.2	.1	3	25	36	11	17	13	-	53	-
11	9	61	10.6	9.8	7.5	1.0	10	1.4	2.1	.2	3	22	34	18	31	14	.1	51	-
11	15	61	10.0	10.4	7.6	.3	6	1.2	3.1	.1	4	25	38	17	23	14	.1	58	490
11	22	61	5.6	11.8	7.5	.1	8	1.4	-	.1	3	24	36	13	25	15	-	54	780
11	27	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1100
11	29	61	4.0	12.0	7.4	.3	7	1.3	2.8	.2	3	18	30	18	66	16	.0	48	-
12	6	61	4.4	12.2	7.6	.2	4	1.0	2.1	.1	3	23	34	14	23	15	-	54	62
12	13	61	4.0	12.1	7.5	.3	4	.5	2.2	.1	3	24	38	11	19	15	-	58	6400
12	20	61	3.0	12.9	7.5	.8	4	1.0	-	.1	4	25	40	13	33	17	-	62	6900
12	27	61	.6	13.5	7.6	.7	1	1.0	2.1	.2	5	20	34	17	29	15	-	54	430
1	3	62	.4	13.8	7.6	.3	0	.9	2.7	.2	3	25	40	13	23	16	.0	60	260
1	10	62	.6	13.3	7.4	.9	16	1.8	4.5	.4	3	13	22	23	89	12	.1	37	1100
1	17	62	.6	13.4	7.2	1.1	14	1.2	4.2	.3	2	12	22	18	92	15	-	42	1200
1	24	62	1.0	13.5	7.3	.7	9	.9	2.8	.1	2	16	28	11	30	13	.0	48	770
1	31	62	.0	13.6	7.3	1.1	11	.9	4.5	.2	5	18	30	13	26	13	-	51	1000
2	7	62	.0	13.1	7.3	.6	8	1.0	2.7	.1	3	19	32	13	25	13	-	54	3500
2	14	62	.6	13.5	7.3	.4	10	1.1	2.7	.2	4	23	36	15	26	14	-	62	3200
2	21	62	.6	13.5	7.4	.3	6	.7	2.4	.1	4	24	36	11	18	16	.1	63	6700
2	28	62	2.0	13.0	7.4	2.3	13	3.0	5.1	.4	4	24	38	14	84	38	.3	65	41000
3	7	62	1.4	13.2	7.4	1.1	12	2.0	4.3	.2	4	23	34	18	30	12	.1	61	8300
3	14	62	2.6	12.5	7.3	1.8	17	1.5	5.0	.2	3	13	24	18	95	11	-	42	550
3	21	62	4.4	12.3	7.2	1.0	8	1.7	3.3	.1	3	13	24	17	35	11	-	42	60
3	28	62	6.8	11.4	7.1	.7	9	1.4	3.9	.2	2	10	20	13	35	8	.1	34	230
4	4	62	5.6	11.9	6.9	.8	14	1.6	4.3	.4	1	10	20	14	103	8	-	32	300
4	11	62	7.2	11.9	6.9	.5	7	.9	3.3	.1	3	8	22	17	35	8	-	34	150
4	18	62	7.2	12.3	7.2	.3	7	1.0	3.0	.2	2	13	26	19	39	9	.1	40	160
4	25	62	12.8	10.4	7.3	1.7	14	.8	2.3	.1	2	16	27	14	25	11	.1	43	100
5	2	62	14.4	9.3	7.3	1.5	16	1.2	2.7	.1	2	19	25	15	31	11	-	41	800
5	9	62	13.2	9.9	7.4	1.5	17	.6	2.4	.1	3	22	34	15	33	11	-	50	300
5	16	62	17.8	8.9	7.6	1.3	13	.6	2.8	.2	4	26	36	7	26	11	-	54	500
5	23	62	22.2	8.5	7.7	2.0	15	1.3	3.5	.2	4	27	18	15	38	11	-	58	250
5	29	62	20.6	8.3	8.0	2.5	15	1.4	-	.2	3	26	20	15	53	11	.1	62	*10
6	6	62	21.6	7.6	7.6	1.4	15	1.3	3.5	.2	4	30	20	10	46	13	-	61	-
6	13	62	21.0	7.6	7.6	1.1	12	1.1	2.2	.2	3	31	16	11	43	12	-	64	600

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE LEHIGH RIVERS
STATION LOCATION DELAWARE RIVER AT
MARTINS CREEK, PENNSYLVANIA 61

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	20	62	24.4	6.8	7.7	.3	9	1.1	2.2	.1	4	27	14	10	26	11	-	59	400
6	27	62	23.4	7.8	8.0	.6	8	.7	1.8	.1	5	24	20	0	20	12	.1	52	110
7	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220
7	5	62	23.4	7.3	7.7	.5	8	.2	2.1	.2	2	23	14	11	23	10	-	54	-
7	11	62	23.8	7.0	7.8	.2	17	.6	1.8	.1	3	23	16	5	23	17	-	50	170
7	18	62	22.4	7.5	7.8	.8	11	1.1	-	.1	4	24	12	10	21	13	-	51	150
7	25	62	22.4	7.4	7.7	.2	5	1.0	2.2	.1	4	24	18	8	21	11	-	55	220
8	1	62	24.4	7.5	7.6	.5	3	.9	2.4	.1	5	22	14	11	22	16	-	50	100
8	8	62	23.4	7.0	7.4	.7	14	1.0	2.2	.1	3	21	14	7	22	14	-	50	960
8	15	62	22.2	7.5	7.8	.4	19	1.1	2.1	.1	3	21	10	7	18	12	-	52	300
8	22	62	23.8	6.8	7.6	.7	11	.9	1.4	.1	4	23	16	9	21	10	.1	53	120
8	29	62	23.6	6.7	7.5	.3	11	.3	2.0	.1	3	28	16	11	19	8	.0	56	540
9	5	62	21.4	7.3	7.4	.9	16	1.1	2.0	.2	4	26	18	15	25	9	-	55	170
9	12	62	21.0	7.8	7.7	.3	13	1.0	1.7	.1	4	24	20	13	18	8	.0	51	800
9	19	62	18.2	7.7	7.4	.3	12	.8	1.8	.1	3	21	38	15	17	10	-	53	-
9	26	62	16.6	8.2	7.6	.2	10	.6	1.5	.2	4	18	38	17	18	10	.0	58	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Belvidere, New Jersey
Operated by U.S. Geological Survey

STATE Pennsylvania
MAJOR BASIN North Atlantic
MINOR BASIN Delaware-Lehigh Rivers
STATION LOCATION Delaware River at
Martins Creek, Pennsylvania

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	1.870	2.380	3.850	2.680	4.380	8.980	29.900	6.840	2.090	1.870	1.630	2.020
2	1.890	1.780	3.730	2.620	4.050	8.080	53.600	7.540	2.500	1.740	1.640	2.020
3	1.940	1.780	3.350	2.740	3.780	9.020	34.100	7.420	2.310	1.660	1.580	1.450
4	2.220	2.090	2.930	3.780	4.280	7.100	22.600	6.840	2.060	1.580	1.580	1.370
5	2.090	2.360	2.930	3.170	4.100	6.030	17.600	6.060	2.020	1.600	1.630	1.330
6	1.970	2.270	2.950	3.880	4.740	5.520	14.800	5.460	2.250	1.580	1.520	1.700
7	1.950	3.610	2.810	9.320	4.790	4.900	14.500	4.790	2.250	1.570	1.750	1.630
8	1.950	4.100	2.910	29.000	4.880	4.790	27.700	4.900	2.110	1.580	2.160	1.600
9	1.950	3.350	3.040	23.200	4.930	4.990	33.300	5.220	2.060	1.570	2.070	1.540
10	1.920	3.260	2.930	15.600	4.600	4.710	25.600	4.900	1.950	1.600	2.440	1.310
11	1.840	2.760	2.700	11.100	3.470	4.960	21.400	4.690	1.700	1.870	2.070	1.370
12	1.900	1.920	2.830	8.240	2.850	9.750	17.600	4.570	2.230	1.640	1.770	1.740
13	1.900	1.800	3.560	6.570	3.000	15.800	16.200	3.920	2.680	1.740	1.890	1.620
14	1.840	2.270	3.210	5.880	3.590	21.000	17.000	3.320	2.480	1.850	1.630	1.640
15	1.920	3.300	2.870	6.000	3.280	19.000	16.200	3.540	2.200	1.770	1.720	1.720
16	1.940	4.000	2.270	10.800	3.080	15.600	14.200	3.780	2.140	1.580	1.720	1.890
17	1.900	4.230	2.250	16.200	3.280	14.000	13.300	3.760	2.090	1.520	1.740	1.350
18	1.850	3.850	2.400	11.200	3.120	12.600	11.800	3.920	1.950	1.580	1.870	1.540
19	1.840	3.610	3.830	8.520	2.680	11.800	11.100	3.730	1.990	1.700	1.740	1.900
20	2.040	3.170	6.120	7.100	2.540	12.100	11.100	3.190	2.090	1.630	1.520	1.690
21	2.110	3.040	7.220	5.970	2.890	13.800	10.200	2.760	1.990	1.600	1.640	1.600
22	2.040	3.000	6.840	6.330	2.910	17.000	9.580	2.660	1.600	1.700	2.180	1.520
23	1.750	3.000	5.400	6.660	2.890	18.400	8.740	2.680	1.630	1.660	1.750	1.460
24	1.840	3.300	5.020	7.600	3.520	19.700	8.860	2.500	1.990	1.800	1.630	1.280
25	2.270	4.990	4.490	8.200	3.610	17.400	8.610	2.660	2.130	1.780	1.620	1.300
26	2.250	7.360	3.900	6.540	4.360	16.000	7.680	2.500	2.130	1.820	1.600	1.720
27	2.090	6.940	3.780	6.980	6.420	15.900	7.020	2.250	2.350	1.820	1.380	1.820
28	2.130	5.820	4.570	6.780	8.780	16.000	6.630	2.040	2.070	1.630	1.480	2.420
29	1.800	5.100	4.380	7.060		15.500	6.330	1.820	1.940	1.580	1.970	2.830
30	1.770	4.490	3.300	6.150		15.900	5.760	1.820	1.940	1.520	1.750	2.400
31	1.920		3.080	5.070		18.500		1.890		1.510	1.700	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE FLORIDA
MAJOR BASIN SOUTHEAST
MINOR BASIN PERDIDO-ESCAMBIA RIVERS
STATION LOCATION ESCAMBIA RIVER AT
CENTURY, FLORIDA

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DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	23	61	100	0	0	0	0	20	0	20	80	0	20																				
10	31	61	100	0	0	0	0	0	0	0	130	0	630																				
11	6	61	100	0	0	20	0	40	0	40	20	20	0																				
11	16	61	100	0	0	0	0	0	0	0	100	0	60																				
11	19	61	600	0	0	60	0	60	0	100	350	80	100																				
12	6	61	200	0	20	0	0	0	0	120	20	0	40																				
12	13	61	200	0	0	0	0	0	0	0	220	0	20																				
12	21	61	00	0	0	0	0	0	0	0	0	0	0																				
12	27	61	200	0	0	20	0	130	20	0	50	0	20																				
1	31	62	400	0	0	20	0	50	20	50	230	50	20																				
2	14	62	200	0	0	0	0	0	0	100	120	0	20																				
2	27	62	500	0	0	40	0	210	0	60	150	0	0	51	1																		
3	14	62	400	20	0	0	0	190	50	60	100	0	60	51	1																		
3	27	62	300	0	0	40	0	0	20	0	270	0	60																				
4	11	62	1100	40	0	0	0	60	580	170	250	0	0																				
4	25	62	400	0	0	40	0	20	130	80	80	20	20																				
5	8	62	300	0	0	40	0	0	0	150	110	20	0																				
5	29	62	1000	0	0	210	60	20	0	550	130	40	250	68	2																		
6	12	62	500	0	0	60	0	60	20	40	270	0	150																				
6	27	62	800	0	0	170	0	150	230	20	250	0	20	63	1																		
8	17	62	800	0	20	40	0	100	20	40	580	0	170	81	1																		
9	6	62	600	80	0	230	0	120	20	80	40	0	0																				
9	20	62	200	0	0	60	0	0	0	10	100	30	140																				

NATIONAL WATER QUALITY NETWORK

PLANKTCN POPULATION

STATE FLORIDA
MAJOR BASIN SOUTHEAST
MINOR BASIN PERDIDO-ESCAMBIA RIVERS
STATION LOCATION ESCAMBIA RIVER AT
CENTURY, FLORIDA 062

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	23	61	32	15	33	10	57	8	64	4	63	150	0	3											0							0	0
10	31	61	32	15	33	14	64	8	31	5	58	20	0	3											1							0	0
11	6	61	33	32	64	13	32	11	2	5	39	20	0	0											0							0	0
11	16	61	33	19	32	13	65	5	57	4	59	20	0	0											1							1	0
11	19	61	32	20	43	16	74	10	97	6	48	0	0	0											0							0	0
12	6	61	33	34	32	6	64	5	1	5	49	0	0	0											0							0	0
12	13	61	33	15	64	6	88	5	32	5	69	0	0	1											0							3	0
12	21	61										0	0	0											0							0	0
12	27	61	32	6	97	6	33	5	92	4	79	20	0	10											13	76	2	51	1			1	1
1	31	62	43	10	92	10	32	8	97	5	67	0	0	1											0							0	0
2	14	62										20	0	2											0							1	1
2	27	62										20	0	2											0							1	0
3	14	62	92	11	2	10	43	7	74	6	66	0	0	1											0							1	0
3	27	62	92	15	43	9	62	6	71	4	66	40	0	0											0							0	0
4	11	62	92	9	57	9	49	5	50	5	72	0	0	1											0							0	0
4	25	62	82	19	92	4	26	4	43	4	69	0	0	2											0							0	5
5	8	62	57	14	71	10	1	8	43	7	61	0	0	0											0							0	0
5	29	62	57	26	28	9	50	7	43	7	51	0	0	2											1							0	0
6	12	62	57	20	43	6	32	5	2	4	65	0	0	5											0							0	0
6	27	62	95	16	43	9	92	7	57	5	63	0	0	8											0							1	0
8	17	62	32	24	92	10	53	7	65	7	52	0	0	442	20	7	11	3	17	3	22	1	16	1	0							12	3
9	6	62	43	16	32	12	92	8	53	6	58	0	0	228	15	6									0							0	0
9	20	62	93	9	32	6	33	5	3	5	75	0	0	175	20	5	22	1	11	1					0							6	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE FLORIDA
MAJOR BASIN SOUTHEAST
MINOR BASIN PERDIDO-ESCAMBIA RIVERS
STATION LOCATION ESCAMBIA RIVER AT
CENTURY, FLORIDA

62

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	23	61	11	1	-	-	-	-	-	-	9	5	11	6	20	8						
10	31	61	11	10	-	-	-	-	-	-	2	5	5	6	7	8						
11	6	61	11	16	0	0	0	1	0	1	4	4	1	5	5	6						
11	14	61	11	28	-	-	-	-	-	-	8	5	10	6	18	8						
11	20	61	11	30	-	-	-	-	-	-	24	7	1	5	25	9						
12	1	61	12	12	-	-	-	-	-	-	5	6	0	5	5	8						
12	6	61	12	14	0	1	0	0	0	1	10	5	7	6	17	8						
12	13	61	12	26	-	-	-	-	-	-	36	7	25	6	61	9						
12	21	61	1	2	-	-	-	-	-	-	0	6	25	6	25	8						
12	27	61	1	3	-	-	-	-	-	-	23	6	15	6	38	8						
1	23	62	1	31	0	1	0	0	0	1	30	5	19	4	49	7						
1	31	62	2	12	-	-	-	-	-	-	38	7	15	5	53	9						
2	7	62	2	14	1	1	0	1	1	1	35	5	10	4	45	6						
2	14	62	2	23	-	-	-	-	-	-	15	5	14	6	29	8						
2	23	62	3	6	-	-	-	-	-	-	56	7	31	6	87	9						
2	27	62	3	9	-	-	-	-	-	-	43	7	28	6	71	9						
3	9	62	3	20	1	1	0	1	1	1	28	5	13	4	41	6						
3	14	62	3	26	-	-	-	-	-	-	21	6	18	6	39	8						
3	21	62	4	3	-	-	-	-	-	-	20	6	13	5	33	7						
3	27	62	4	4	-	-	-	-	-	-	78	6	29	5	107	7						
4	3	62	4	13	1	1	0	1	1	1	102	7	61	6	163	0						
4	11	62	4	24	-	-	-	-	-	-	58	7	35	6	93	9						
4	18	62	4	30	-	-	-	-	-	-	39	7	27	6	66	10						
4	25	62	5	23	-	-	-	-	-	-	1	7	8	7	9	10						
5	2	62	5	25	-	-	-	-	-	-	75	9	42	7	117	11						
5	8	62	6	11	0	1	0	1	0	1	10	7	10	7	20	10						
5	17	62	6	25	-	-	-	-	-	-	11	7	12	7	23	10						
5	29	62	6	29	-	-	-	-	-	-	3	3	8	3	11	4						
6	6	62	7	3	1	1	0	0	1	1	4	5	13	6	17	8						
6	12	62	7	14	-	-	-	-	-	-	7	3	16	4	23	5						
6	19	62	7	17	-	-	-	-	-	-	2	5	7	6	9	7						
6	27	62	7	24	-	-	-	-	-	-	17	6	10	5	27	7						
7	31	62	9	12	0	1	0	0	0	0	10	6	19	7	29	9						
8	17	62	8	31	0	1	0	1	0	1	21	6	10	6	31	8						
8	24	62	9	6	-	-	-	-	-	-	9	6	13	6	22	8						
9	6	62	9	14	0	0	0	1	0	1	4	6	1	7	5	9						
9	20	62	10	17	-	-	-	-	-	-	34	7	6	6	40	9						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE FLORIDA

MAJOR BASIN SOUTHEAST

MINOR BASIN PERDIDO-ESCAMBIA RIVERS

STATION LOCATION ESCAMBIA RIVER AT
CENTURY, FLORIDA 62

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES					CHLOROFORM EXTRACTABLES								
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	6	61	11	19	3503	290	83	207	1	17	28	4	2	18	4	11	5	1	20
3	7	62	3	15	1844	329	113	216	15	23	24	2	2	17	3	14	9	1	27
5	28	62	6	4	3420	151	73	78	2	20	17	2	2	12	1	10	7	1	16
6	4	62	6	11	5020	75	49	26	1	15	12	1	1	10	0	6	5	1	9

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE FLORIDA
MAJOR BASIN SOUTHEAST
MINOR BASIN PERDIDO ESCAMBIA RIVERS
STATION LOCATION ESCAMBIA RIVER AT
CENTURY, FLORIDA 62

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
11	19	61	17.0	7.0	6.7	2.1	46	1.9	5.4	.4	8	26	32	20	130	7	.2	77	-
11	21	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2100
12	4	61	14.0	8.2	6.6	1.7	52	-	-	.3	8	28	39	30	140	10	.1	83	2700
12	18	61	12.0	9.2	6.7	2.1	36	-	-	.1	10	30	34	20	110	8	.2	72	-
1	15	62	8.0	9.5	6.5	1.8	47	-	-	.2	11	25	36	10	80	11	.1	80	-
1	29	62	10.0	9.4	6.8	1.4	59	-	-	.7	9	33	42	40	260	14	.4	-	-
2	12	62	13.0	9.1	6.7	1.2	44	-	-	.4	8	36	47	10	50	9	.2	69	1600
4	23	62	-	8.8	6.7	1.7	32	-	-	.2	-	29	34	30	55	-	-	89	-
5	7	62	-	8.6	6.8	2.1	37	-	-	.5	90	27	41	25	60	-	-	79	-
5	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7000
5	21	62	22.0	7.7	6.7	1.9	29	-	-	.4	87	30	35	50	45	-	-	72	-
6	4	62	25.0	6.6	6.9	2.4	49	-	-	.5	93	26	37	40	70	-	-	84	1300
6	18	62	25.0	6.9	6.8	2.2	41	-	-	.3	100	31	39	45	100	-	-	92	-
8	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4400

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Century, Florida
Operated by U.S. Geological Survey

STATE Florida
MAJOR BASIN Southeast
MINOR BASIN Perdido-Escambia Rivers
STATION LOCATION Escambia River at
Century, Florida

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	2.100	1.400	3.150	5.930	7.000	12.100	37.000	12.200	2.640	3.160	2.980	1.320
2	1.890	1.360	2.840	6.380	6.520	13.000	42.400	9.470	2.600	2.450	2.250	1.330
3	1.840	1.340	2.610	6.010	6.130	15.800	38.300	7.420	2.790	2.200	1.900	1.220
4	1.920	1.500	2.540	5.420	5.790	18.000	32.400	6.240	3.200	1.900	1.910	1.140
5	1.840	1.600	2.360	5.390	5.700	18.500	29.600	5.600	2.950	1.710	1.880	1.130
6	1.790	1.700	2.570	9.960	5.680	17.600	29.200	4.980	2.740	1.780	1.850	1.160
7	1.710	1.760	2.740	15.100	5.950	15.800	31.500	4.400	2.740	2.240	1.790	1.370
8	1.700	1.660	2.700	17.000	5.820	13.100	34.100	4.050	2.510	2.820	1.690	1.590
9	1.690	1.770	2.420	16.400	5.370	10.900	31.400	3.860	2.270	2.900	1.520	1.570
10	1.650	1.750	3.430	16.000	5.370	9.420	26.000	3.430	2.220	2.720	1.380	1.540
11	1.660	1.680	8.920	15.700	5.310	8.470	21.500	3.220	2.430	2.250	1.280	1.460
12	1.580	1.510	12.900	15.000	5.020	8.040	18.400	3.140	3.060	1.870	1.230	1.370
13	1.560	1.500	16.500	14.200	4.810	8.180	16.400	3.000	3.540	1.780	1.210	1.610
14	1.520	1.870	17.600	13.100	4.230	8.060	14.800	2.800	3.290	1.750	1.220	1.780
15	1.500	3.010	19.200	11.100	4.050	8.030	13.600	2.730	2.700	1.760	1.280	1.650
16	1.460	6.180	21.200	9.170	6.100	8.060	12.200	2.450	2.600	2.140	1.700	1.460
17	1.480	9.220	22.900	8.020	5.520	7.880	11.300	2.400	2.500	2.780	2.850	1.510
18	1.380	8.830	24.300	7.330	5.100	7.540	10.800	2.470	2.320	2.920	2.090	2.020
19	1.390	5.640	23.800	7.100	14.700	7.210	10.800	2.450	2.360	2.280	2.180	2.400
20	1.360	4.270	22.400	7.140	20.400	6.860	10.300	2.510	2.540	1.900	2.300	2.400
21	1.330	3.730	20.600	7.530	19.600	6.320	8.840	2.270	2.520	1.700	2.180	2.470
22	1.320	3.200	18.500	7.630	17.000	6.090	7.510	2.290	3.130	1.580	2.070	2.600
23	1.270	3.540	16.000	7.380	15.400	5.970	6.610	2.180	3.170	1.460	1.940	2.330
24	1.340	5.080	13.200	7.010	15.800	6.020	6.030	1.980	2.900	1.420	1.760	1.810
25	1.420	5.550	10.700	6.850	16.500	5.820	5.700	1.860	3.310	1.460	1.580	1.590
26	1.360	4.580	8.350	6.570	15.500	6.850	5.500	1.800	3.480	1.630	1.480	1.470
27	1.300	4.110	7.090	6.410	14.200	7.710	5.140	1.800	2.670	1.660	1.400	1.440
28	1.280	3.930	6.820	7.110	12.900	6.870	5.260	1.740	2.390	1.840	1.320	1.580
29	1.330	4.040	6.720	7.760		6.000	9.630	1.590	2.410	2.200	1.360	1.720
30	1.280	3.630	6.230	7.800		5.590	12.800	1.690	3.100	2.880	1.370	1.520
31	1.340		5.900	7.510		14.700		1.800		3.260	1.320	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	NEW YORK
MAJOR BASIN	NORTHEAST
MINOR BASIN	LAKE ERIE-NIAGARA RIVER
STATION LOCATION	LAKE ERIE AT BUFFALO, NEW YORK

14

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	4	61	10	16	0	0	0	1	0	1	4	4	9	6	13	7						
10	11	61	10	23	-	-	-	-	-	-	3	5	4	7	7	9						
1(	18	61	10	30	-	-	-	-	-	-	3	6	7	6	10	8						
11	1	61	11	16	-	-	-	-	-	-	12	7	17	7	29	10						
11	8	61	11	16	0	0	0	1	0	1	2	4	4	5	6	6						
11	15	61	11	28	-	-	-	-	-	-	0	4	6	5	6	6						
11	22	61	11	30	-	-	-	-	-	-	2	5	7	7	9	8						
11	29	61	12	7	-	-	-	-	-	-	15	6	11	7	26	9						
12	6	61	12	13	1	1	0	1	1	1	22	6	8	5	30	8						
12	13	61	12	19	-	-	-	-	-	-	12	6	13	7	25	9						
12	21	61	12	28	-	-	-	-	-	-	2	6	10	7	12	9						
1	3	62	1	10	1	1	1	1	2	1	6	4	12	5	18	7						
1	10	62	1	19	-	-	-	-	-	-	38	7	11	5	49	9						
1	17	62	1	25	-	-	-	-	-	-	14	6	8	7	22	9						
1	24	62	2	2	-	-	-	-	-	-	34	11	7	7	41	13						
1	31	62	2	8	-	-	-	-	-	-	7	6	8	7	15	9						
2	8	62	2	16	17	8	0	1	17	8	67	11	16	5	83	12						
2	14	62	2	23	-	-	-	-	-	-	3	5	5	7	8	9						
2	21	62	3	2	-	-	-	-	-	-	3	5	9	7	12	9						
2	28	62	3	12	-	-	-	-	-	-	1	6	9	8	10	10						
3	7	62	3	16	0	1	0	1	0	1	5	4	7	5	12	6						
3	14	62	3	23	-	-	-	-	-	-	12	6	24	7	36	9						
3	21	62	3	30	-	-	-	-	-	-	4	5	7	7	11	9						
3	28	62	4	6	-	-	-	-	-	-	22	4	36	5	58	6						
4	4	62	4	17	0	1	0	1	0	1	24	6	15	7	39	8						
4	11	62	4	24	-	-	-	-	-	-	4	4	15	5	19	6						
4	18	62	4	30	-	-	-	-	-	-	7	5	19	7	26	9						
4	25	62	3	25	-	-	-	-	-	-	1	7	19	9	20	11						
5	2	62	5	25	-	-	-	-	-	-	21	7	14	9	35	11						
5	8	62	6	12	0	0	0	0	0	0	10	5	14	7	24	9						
5	17	62	6	22	-	-	-	-	-	-	5	6	14	9	19	11						
5	23	62	6	27	-	-	-	-	-	-	20	7	13	8	33	11						
5	31	62	7	3	-	-	-	-	-	-	19	5	13	[illegible]	32	8						
6	6	62	7	6	0	0	1	1	1	1	13	5	15	7	28	9						
6	13	62	7	10	-	-	-	-	-	-	4	5	11	7	15	9						
6	20	62	7	12	-	-	-	-	-	-	2	5	12	8	14	9						
6	27	62	7	23	-	-	-	-	-	-	42	5	11	6	53	7						
7	5	62	8	1	0	0	0	1	0	1	5	7	9	8	14	11						
7	11	62	8	7	-	-	-	-	-	-	4	5	20	9	24	10						
7	18	62	8	2	-	-	-	-	-	-	1	6	13	8	14	10						
7	25	62	8	9	-	-	-	-	-	-	46	7	13	7	59	10						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN LAKE ERIE-NIAGARA RIVER
STATION LOCATION LAKE ERIE AT
BUFFALO, NEW YORK 14

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
8	1	62	8	21	-	-	-	-	-	-	36	7	9	7	45	10						
8	8	62	8	28	0	0	0	1	0	1	7	5	13	7	20	8						
8	15	62	8	29	-	-	-	-	-	-	28	6	9	7	37	9						
8	22	62	9	4	-	-	-	-	-	-	22	4	6	5	28	6						
8	29	62	9	24	-	-	-	-	-	-	17	7	6	10	23	12						
9	5	62	9	19	0	0	0	0	0	0	2	6	5	9	7	11						
9	12	62	10	9	-	-	-	-	-	-	14	7	13	7	27	10						
9	19	62	10	10	-	-	-	-	-	-	34	26	13	7	47	27						
9	26	62	10	17	-	-	-	-	-	-	19	6	12	7	31	9						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN LAKE ERIE NIAGARA RIVER
STATION LOCATION LAKE ERIE AT
BUFFALO, NEW YORK 14

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	400	40	0	40	0	40	0	170	60	0	0	71	1																		
10	18	61	200	0	0	20	0	0	0	80	80	20	0																				
11	1	61	300	0	0	80	0	0	20	100	100	0	20																				
11	15	61	200	20	0	40	0	0	0	60	40	20	40																				
12	4	61	1000	0	0	130	0	40	0	580	230	60	230	71	2	69	1																
12	21	61	600	0	0	20	0	0	0	350	190	0	40	71	1																		
1	3	62	700	0	0	90	0	0	70	430	160	110	20	71	2																		
1	17	62	500	50	0	50	0	50	0	290	20	70	0	69	1																		
2	8	62	100	0	0	0	0	0	0	70	20	20	50																				
2	21	62	00	0	0	0	0	0	20	20	0	0	0																				
3	7	62	100	20	0	20	0	0	20	80	0	0	40																				
3	22	62	100	0	0	20	0	40	0	20	0	50	0																				
4	4	62	300	0	0	0	0	0	20	290	20	0	0																				
4	18	62	4300	0	0	0	0	40	150	4080	0	390	0	71	5																		
5	2	62	1900	0	0	330	0	310	390	770	100	150	20	71	3	63	2	51	1	25	1												
5	17	62	500	0	0	150	0	0	60	370	0	60	0	71	2																		
5	31	62	300	0	60	0	0	0	0	190	20	130	0																				
6	20	62	00	0	0	0	0	0	0	0	0	0	0																				
7	5	62	100	0	0	40	0	0	0	0	40	0	20																				
8	1	62	100	0	0	0	0	0	0	40	40	0	0																				
8	15	62	900	120	40	520	80	0	40	40	80	0	40	44	2																		
9	5	62	300	40	0	0	0	0	0	210	80	80	0																				
9	19	62	700	0	100	20	0	0	20	170	410	40	40																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN LAKE ERIE-NIAGARA RIVER
STATION LOCATION LAKE ERIE AT
BUFFALO, NEW YORK 014

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	4	61	59	30	83	29	47	17	80	7	17	0	0	251	11	5	17	5							12	51	1					0	0
10	18	61	45	39	83	25	47	18	95	14	4	0	0	48	17	3	11	2							5	51	1					0	0
11	1	61	45	33	83	30	47	17	59	5	15	0	0	3											0							0	0
11	15	61	59	34	45	18	47	18	83	17	13	20	0	22	17	1	11	1							3							0	0
12	4	61	59	39	83	37	47	13	45	7	4	0	0	1											1							0	0
12	21	61	83	41	59	30	80	16	47	5	8	0	0	1											3							0	0
1	3	62	59	54	83	19	80	12	45	7	8	90	0	2											13	51	3					0	0
1	17	62	59	80	83	9	80	6	95	2	3	0	0	10	17	1									6	76	1					0	0
2	8	62	59	51	80	25	95	8	9	7	9	0	0	0											1							0	0
2	21	62	59	44	80	20	83	12	47	9	15	0	0	1											2							0	0
3	7	62	80	40	82	14	9	13	83	13	20	390	10	2											4	76	1					0	0
3	22	62	9	24	83	23	59	22	95	6	25	0	0	0											1							0	0
4	4	62	82	47	45	15	59	9	95	7	23	0	10	0											4	76	1					0	0
4	18	62	82	66	9	15	83	4	80	3	12	0	20	5											1							0	0
5	2	62	83	59	59	12	82	8	95	5	16	20	20	7											8	76	2					0	0
5	17	62	83	45	59	19	47	10	95	8	18	0	0	81	21	3	14	3	11	2	17	2			20	76	3	50	2			0	0
5	31	62	83	50	80	10	95	5	59	5	30	80	0	314	11	6	17	3	10	1					440	76	5	51	5	50	5	0	0
6	20	62	83	36	59	20	80	14	45	9	21	0	0	234	11	6	17	3	10	1					38	50	4	76	1			1	1
7	5	62										0	10	1260	22	7	11	7	2	6	17	5	21	4	77	50	4	76	4	51	2	0	0
8	1	62	47	79	83	10	80	4	95	2	5	0	0	107	17	5	11	3							20	50	2	76	2	77	1	0	0
8	15	62	47	54	95	36	82	3	83	3	4	0	0	282	17	6	11	4	5	1	22	1			27	50	4					0	0
9	5	62	95	55	82	14	47	9	80	4	18	0	0	385	17	6	11	5	22	3	10	2	21	1	9	50	2					0	0
9	19	62	45	34	95	34	59	9	83	4	19	0	0	334	17	6	11	3	5	2	46	1			15	50	2	53	1	76	1	0	0

687-228 O-63—19

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN LAKE ERIE-NIAGARA RIVER
STATION LOCATION LAKE ERIE AT
BUFFALO, NEW YORK 14

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
9	29	61	10	9	4965	146	30	116	-	-	-	-	-	-	-	-	-	-	-
11	8	61	11	17	4500	149	34	115	-	-	-	-	-	-	-	-	-	-	-
11	27	61	12	6	3712	230	53	177	-	-	-	-	-	-	-	-	-	-	-
11	27	61		*	13177	171	38	133	2	10	13	3	2	8	0	4	2	1	6
1	2	62	1	9	2610	213	64	149	-	-	-	-	-	-	-	-	-	-	-
1	31	62	2	7	4500	149	44	105	-	-	-	-	-	-	-	-	-	-	-
2	21	62	3	1	5062	143	34	109	-	-	-	-	-	-	-	-	-	-	-
3	20	62	3	28	5212	150	32	118	-	-	-	-	-	-	-	-	-	-	-
3	20	62		*	17384	157	41	116	3	12	11	1	1	9	0	4	4	1	6
4	11	62	4	19	4955	137	32	105	-	-	-	-	-	-	-	-	-	-	-
5	15	62	5	22	4910	156	60	96	-	-	-	-	-	-	-	-	-	-	-
6	12	62	6	21	6825	148	47	101	-	-	-	-	-	-	-	-	-	-	-
6	12	62		*	16690	147	46	101	2	14	14	2	1	10	1	6	4	1	5
7	11	62	7	19	4725	192	69	123	-	-	-	-	-	-	-	-	-	-	-
8	3	62	8	10	4500	218	78	140	-	-	-	-	-	-	-	-	-	-	-
9	4	62	9	14	4650	176	56	120	-	-	-	-	-	-	-	-	-	-	-
9	4	62		*	13875	195	68	127	3	18	20	3	3	14	0	8	6	1	12

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN LAKE ERIE-NIAGARA RIVER
STATION LOCATION LAKE ERIE AT
BUFFALO, NEW YORK 14

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	4	61	17.5	8.7	8.2	.7	8	.2	1.4	.0	20	88	126	0	5	23	.1	207	8
10	11	61	19.5	9.0	8.4	1.0	6	.2	-	.0	25	90	126	0	5	23	.1	210	*4
10	18	61	17.0	9.0	8.3	1.3	9	.2	1.2	.0	23	92	128	0	27	21	.1	196	680
11	1	61	14.8	9.4	8.0	1.6	9	.4	1.7	.0	23	88	126	0	50	20	.1	207	*40
11	8	61	13.0	9.8	8.1	1.2	9	.2	1.2	.0	23	90	126	0	15	22	.0	196	24
11	15	61	12.0	10.3	8.1	1.3	9	.4	1.5	.0	23	90	130	0	10	21	.1	191	8
11	22	61	9.0	10.5	8.4	1.2	7	.2	-	-	20	90	130	0	2	22	.1	200	*4
11	29	61	9.0	11.0	8.2	2.0	5	.2	1.7	.0	20	90	130	0	15	22	.1	192	12
12	6	61	7.3	10.6	8.1	2.5	7	.2	1.8	.0	23	88	128	0	50	21	.1	196	40
12	13	61	8.0	10.8	8.1	3.2	10	.8	1.7	.0	20	84	132	0	75	22	.1	187	*4
12	21	61	6.0	12.4	8.1	1.2	7	.2	2.1	.0	20	90	120	0	15	23	.1	196	30
1	3	62	4.5	13.0	8.1	2.7	7	.2	1.8	.1	23	90	132	0	50	22	.1	208	60
1	10	62	4.0	13.5	8.2	1.2	6	.6	2.2	.0	20	-	126	0	50	21	.1	187	20
1	17	62	[illegible].5	13.4	8.1	.6	5	.8	2.2	.0	23	90	136	0	20	22	.1	208	4900
1	24	62	4.0	14.0	8.0	1.2	9	.4	2.0	.0	23	88	134	0	20	23	.1	190	20
1	31	62	3.5	14.2	8.1	.6	11	.2	1.2	.0	23	86	134	0	18	24	.1	193	*4
2	8	62	3.5	14.2	8.0	.6	11	.2	1.9	.0	20	88	136	0	10	20	.1	187	*4
2	14	62	4.5	13.6	8.1	1.5	9	.7	1.7	.0	20	88	138	0	5	22	.1	200	*4
2	21	62	3.0	13.0	8.0	-	8	.7	-	.0	20	90	136	0	2	22	.1	199	-
2	28	62	5.0	12.4	8.1	.8	8	.2	1.2	.0	23	88	134	0	2	22	.1	186	-
3	7	62	5.0	13.4	8.1	1.0	7	.2	1.3	.0	20	86	138	0	2	22	.1	190	*4
3	14	62	4.0	12.6	8.1	.9	10	.2	2.0	.0	18	86	130	0	25	21	.1	130	*4
3	21	62	3.5	13.0	8.1	1.4	12	.2	1.6	.0	20	80	134	0	5	21	.1	185	4
3	25	62	5.0	13.3	7.7	2.0	7	.2	1.2	.0	20	84	140	0	2	22	.1	189	-
3	28	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*4
4	4	62	4.0	13.7	8.2	1.5	7	.2	1.9	.0	20	88	120	0	10	22	.1	200	*4
4	11	62	7.0	13.0	8.0	2.0	11	.2	1.2	.0	20	88	130	0	5	18	.1	185	-
4	18	62	7.0	13.9	8.1	2.0	5	.2	1.1	.0	20	80	132	0	2	13	.1	188	*4
4	25	62	5.0	12.8	8.2	3.5	5	.2	2.2	.0	20	80	110	0	5	17	.1	170	*4
5	2	62	10.0	13.7	8.2	3.0	6	.7	2.6	.0	23	80	120	0	10	20	.1	192	360
5	9	62	10.0	12.5	8.2	2.3	8	.6	2.5	.0	20	96	134	0	10	21	.1	208	1800
5	17	62	14.0	13.0	8.2	1.3	6	.6	2.6	.0	20	90	128	0	2	21	.1	198	*4
5	23	62	16.5	12.0	8.3	.9	8	.8	1.6	.0	23	86	138	0	5	21	.1	193	*4
5	31	62	17.0	10.0	8.4	2.4	5	.8	2.4	.0	23	96	136	0	5	21	.1	189	-
6	6	62	18.0	10.2	8.4	2.5	5	.4	1.2	.0	20	88	132	0	5	22	.1	174	350
6	13	62	17.0	10.0	8.3	4.7	11	.2	1.8	.0	20	88	128	0	2	20	.1	187	*40
6	20	62	18.0	9.2	8.3	1.7	5	.4	1.8	.0	20	88	126	0	5	22	.1	199	-
6	27	62	20.0	9.0	8.2	1.4	6	.7	1.7	.0	18	88	128	0	2	23	.1	182	-
7	5	62	22.0	9.2	8.3	1.6	4	.8	2.6	.0	20	88	126	0	2	21	.1	186	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	NEW YORK
MAJOR BASIN	NORTHEAST
MINOR BASIN	LAKE ERIE-NIAGARA RIVER
STATION LOCATION	LAKE ERIE AT BUFFALO, NEW YORK

14

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	11	62	21.5	9.0	8.3	3.8	16	1.8	2.7	.0	18	88	130	0	2	21	.1	181	*40
7	18	62	22.0	8.7	8.3	1.7	19	1.2	2.4	.0	23	80	130	0	2	21	.1	198	*4
7	25	62	23.0	8.5	8.4	3.5	10	1.2	2.9	.0	23	88	132	0	2	21	.1	194	11
8	1	62	22.0	8.6	8.3	1.0	13	.8	2.6	.0	18	84	136	0	2	22	.1	216	*10
8	8	62	23.0	8.5	8.4	2.4	17	.9	1.6	.0	20	86	132	0	2	22	.2	186	*10
8	15	62	23.0	8.2	8.3	.7	12	.9	1.9	.0	23	88	132	0	5	23	.1	183	-
8	22	62	23.0	9.6	8.4	3.6	15	.8	1.9	.0	23	84	-	0	2	23	.1	192	-
8	29	62	23.0	8.7	8.3	2.1	9	.9	2.6	.0	20	80	126	0	0	22	.1	207	-
9	5	62	21.0	8.3	8.3	1.0	13	.8	2.2	.0	20	84	128	0	2	21	.1	185	380
9	12	62	21.0	8.1	8.3	1.7	14	2.2	3.0	.0	20	88	128	0	37	22	.1	233	85
9	19	62	20.0	8.4	8.3	1.7	11	.8	2.9	.0	23	88	138	0	30	23	.1	209	50
9	26	62	19.0	8.8	8.3	-	17	.7	1.9	.0	23	88	132	0	7	25	.7	209	16

STREAM FLOW DATA - 1961-1962

Thousand cubic feet per second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineers
U.S. Lake Survey

STATE	New York
MAJOR BASIN	Northeast
MINOR BASIN	Lake Erie-Niagara River
STATION LOCATION	Lake Erie at Buffalo, New York

October	November	December	January	February	March	April	May	June	July	August	September

FLOW DATA NOT APPLICABLE --- LAKE LEVELS ONLY

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. CLAIR-DETROIT RIVERS
STATION LOCATION DETROIT RIVER AT
DETROIT, MICHIGAN 15

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	3	61	10	30	-	-	-	-	-	-	2	6	4	7	6	9						
10	10	61	10	23	0	1	0	1	0	1	0	4	1	5	1	6						
10	16	61	10	31	-	-	-	-	-	-	0	5	38	7	38	9						
10	24	61	11	3	-	-	-	-	-	-	4	5	9	7	13	9						
11	7	61	11	21	-	-	-	-	-	-	3	5	10	6	13	8						
11	14	61	11	24	0	1	0	1	0	1	10	6	6	6	16	8						
11	21	61	11	30	-	-	-	-	-	-	1	6	3	6	4	8						
11	27	61	12	12	-	-	-	-	-	-	5	4	11	5	16	6						
12	5	61	12	14	-	-	-	-	-	-	6	5	7	6	13	8						
12	12	61	12	18	0	1	0	1	0	1	11	4	18	5	29	6						
12	26	61	1	5	-	-	-	-	-	-	3	6	14	6	17	8						
1	2	62	1	10	-	-	-	-	-	-	0	5	3	6	3	8						
1	9	62	1	16	0	0	0	1	0	1	7	4	15	5	22	7						
1	16	62	1	24	-	-	-	-	-	-	12	4	14	5	26	6						
1	23	62	2	2	-	-	-	-	-	-	5	5	8	6	13	8						
1	30	62	2	9	-	-	-	-	-	-	12	6	8	6	20	8						
2	6	62	2	16	-	-	-	-	-	-	6	5	13	6	19	8						
2	12	62	2	27	0	1	0	1	0	1	6	4	13	5	19	6						
2	20	62	3	5	-	-	-	-	-	-	15	5	13	5	28	7						
2	26	62	3	9	-	-	-	-	-	-	0	5	0	6	0	8						
3	6	62	3	20	-	-	-	-	-	-	3	4	7	5	10	6						
3	13	62	3	23	0	1	0	1	0	1	12	4	16	5	28	6						
3	19	62	3	30	-	-	-	-	-	-	30	6	28	7	58	9						
3	27	62	4	4	-	-	-	-	-	-	6	5	13	6	19	7						
4	3	62	4	20	-	-	-	-	-	-	0	4	10	5	10	6						
4	10	62	4	20	0	0	0	0	0	0	6	4	12	5	18	6						
4	21	62	5	23	-	-	-	-	-	-	5	7	8	8	13	11						
5	1	62	5	31	-	-	-	-	-	-	3	7	11	8	14	11						
5	8	62	6	11	-	-	-	-	-	-	4	7	10	8	14	11						
5	15	62	6	20	0	1	0	0	0	1	6	5	6	6	12	8						
5	22	62	6	27	-	-	-	-	-	-	4	6	10	7	14	9						
5	29	62	7	25	-	-	-	-	-	-	0	5	12	7	12	9						
6	4	62	7	3	-	-	-	-	-	-	2	5	12	6	14	8						
6	12	62	7	9	0	0	0	1	0	1	3	5	14	7	17	9						
7	2	62	8	3	-	-	-	-	-	-	0	3	8	3	8	4						
7	10	62	8	13	0	0	0	0	0	0	1	3	6	5	7	6						
7	17	62	8	9	-	-	-	-	-	-	1	5	4	6	5	7						
7	24	62	9	30	-	-	-	-	-	-	4	6	7	7	11	9						
7	31	62	8	17	-	-	-	-	-	-	1	5	14	7	15	9						
8	7	62	8	27	-	-	-	-	-	-	2	6	0	6	2	8						
8	14	62	8	30	0	0	1	1	1	1	1	5	5	6	6	7						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MICHIGAN

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN ST. CLAIR-DETROIT RIVERS

STATION LOCATION DETROIT RIVER AT

DETROIT, MICHIGAN 15

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	21	62	9	5	-	-	-	-	-	-	2	5	13	7	15	9						
8	28	62	9	26	-	-	-	-	-	-	1	6	7	8	8	10						
9	4	62	9	28	-	-	-	-	-	-	1	6	1	7	2	9						
9	11	62	10	1	0	0	0	0	0	0	3	6	3	7	6	9						
9	18	62	10	9	-	-	-	-	-	-	3	5	6	6	9	7						
9	25	62	10	16	-	-	-	-	-	-	11	6	7	8	18	10						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. CLAIR DETROIT RIVERS
STATION LOCATION DETROIT RIVER AT
DETROIT, MICHIGAN 15

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	3	61	100	0	0	50	0	0	0	0	50	0	70																				
10	16	61	300	0	0	20	0	0	0	80	170	20	80																				
11	7	61	300	0	0	60	0	0	20	150	80	20	40																				
11	20	61	700	0	0	40	0	0	0	150	520	100	100	84	1																		
12	5	61	300	0	0	20	0	70	20	20	180	160	420																				
12	19	61	300	0	0	0	0	20	0	120	170	0	40																				
1	2	62	500	70	0	50	20	0	0	110	200	70	20																				
1	16	62	200	0	0	0	0	0	0	90	110	20	90																				
2	6	62	300	0	0	0	0	20	20	0	270	0	70																				
2	20	62	300	0	0	0	0	50	0	70	140	0	50																				
3	6	62	700	0	0	40	0	0	0	210	500	20	60	93	1	82	1																
3	19	62	800	40	0	60	0	20	60	270	370	190	120																				
4	3	62	1200	20	60	0	0	0	40	250	850	20	120	92	2	82	1																
4	17	62	1100	0	0	0	0	70	70	110	860	70	250	88	2																		
5	8	62	1500	0	0	40	0	40	0	330	1080	0	20	92	2	88	2	71	1														
6	4	62	2200	20	0	150	0	0	0	1100	990	300	170	68	2	71	2	92	2	93	1												
6	19	62	2000	0	60	150	0	0	60	930	760	460	680	68	3	92	2	93	1														
7	3	62	1000	40	0	170	20	40	0	230	480	80	210	92	1																		
7	17	62	200	40	0	40	0	0	0	40	40	110	20																				
8	6	62	200	0	0	20	0	80	0	80	40	0	0																				
8	21	62	100	0	0	0	0	0	40	0	40	0	40																				
9	4	62	400	40	0	40	0	0	20	40	210	40	40																				
9	18	62	100	0	0	40	0	0	0	70	10	30	70																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MICHIGAN

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN ST. CLAIR-DETROIT RIVERS

STATION LOCATION DETROIT RIVER AT

DETROIT, MICHIGAN 015

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH					NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	3	61	47	35	56	15	25	14	46	5	31	0	0	3											0							0	0
10	16	61	47	57	56	10	95	8	25	8	17	0	0	3											1							0	0
11	7	61	47	45	25	10	95	10	56	9	26	0	0	0											1							0	0
11	20	61	47	29	95	14	25	9	46	6	42	0	0	2											0							0	0
12	5	61	47	22	95	15	25	10	46	10	43	20	0	1											1							0	0
12	19	61	95	22	47	11	45	10	25	8	49	0	10	8											10	76	2	77	1			0	0
1	2	62	95	25	25	23	47	12	46	12	28	0	0	2											2							0	0
1	16	62	95	29	45	20	47	14	35	5	32	0	0	3											4							0	0
2	6	62	95	20	45	17	47	14	35	8	41	0	0	1											0							0	0
2	20	62	35	13	95	12	47	10	25	9	56	0	0	2											0							0	0
3	6	62	95	37	35	13	47	10	45	9	31	0	0	5	14	5									2							0	0
3	19	62	35	16	9	10	95	8	49	6	60	20	10	19	46	1	47	1							6	76	1					0	0
4	3	62	95	28	47	18	46	17	35	11	26	0	0	23	11	2	14	1							3							0	0
4	17	62	95	36	47	11	71	10	45	9	34	0	0	0											0							0	0
5	8	62	95	30	47	16	92	11	71	9	34	0	0	15	14	1									7	77	1					0	0
6	4	62	95	48	92	18	47	7	26	4	23	60	0	100	11	4	2	2	10	1					19	76	2	51	1	50	1	0	1
6	19	62	95	61	92	16	47	3	46	2	18	0	0	60	11	4	10	1	17	1					12	51	2					0	0
7	3	62	95	29	92	22	80	7	47	7	35	0	0	49	11	4									11	51	2					0	0
7	17	62	25	21	27	10	30	10	26	7	52	20	0	23	11	2	15	1							10	52	1	77	1			0	3
8	6	62										0	0	120	11	4	17	3	22	2	15	2			12	50	2	76	1			0	0
8	21	62	25	36	46	21	48	11	95	3	29	0	0	50	11	3	5	2							5	76	1					0	0
9	4	62	24	24	47	10	73	7	30	6	53	0	0	90	11	4	5	3	16	2	17	1			4	50	1					0	0
9	18	62	25	39	24	17	49	8	56	3	33	0	0	81	11	3	22	3	5	2	17	1	15	1	3	51	1					0	1

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MICHIGAN

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN ST. CLAIR-DETROIT RIVERS

STATION LOCATION DETROIT RIVER AT
DETROIT, MICHIGAN 15

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	11	61	10	24	4560	100	21	79	-	-	-	-	-	-	-	-	-	-	-
11	14	61	11	28	5020	138	27	111	-	-	-	-	-	-	-	-	-	-	-
12	11	61	12	26	5527	110	19	91	-	-	-	-	-	-	-	-	-	-	-
12	11	61		*	15107	116	22	94	1	7	7	1	1	5	0	2	1	0	4
1	9	62	1	23	5320	124	27	97	-	-	-	-	-	-	-	-	-	-	-
2	6	62	2	20	6100	112	33	79	-	-	-	-	-	-	-	-	-	-	-
3	6	62	3	19	4700	137	35	102	-	-	-	-	-	-	-	-	-	-	-
3	6	62		*	16120	124	32	92	2	9	10	1	1	8	0	4	2	1	4
4	3	62	4	17	5680	110	26	84	-	-	-	-	-	-	-	-	-	-	-
5	1	62	5	15	4495	111	39	72	-	-	-	-	-	-	-	-	-	-	-
5	29	62	6	12	5100	109	31	78	-	-	-	-	-	-	-	-	-	-	-
5	29	62		*	15275	109	31	78	1	9	9	1	1	6	1	3	2	0	7
6	29	62	7	17	7215	77	29	48	-	-	-	-	-	-	-	-	-	-	-
8	3	62	8	21	5977	91	28	63	-	-	-	-	-	-	-	-	-	-	-
9	10	62	9	25	6855	75	21	54	-	-	-	-	-	-	-	-	-	-	-
9	10	62		*	20047	81	26	55	1	7	8	1	1	6	0	3	2	1	4

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. CLAIR-DETROIT RIVERS
STATION LOCATION DETROIT RIVER AT
DETROIT, MICHIGAN 15

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	16.2	9.1	8.3	.3	8	-	-	.0	7	81	98	0	50	15	.0	124	20
10	10	61	18.1	9.2	8.2	.5	9	.6	1.6	.0	7	81	96	0	65	15	.1	114	2400
10	17	61	16.4	9.6	8.2	.4	9	.8	1.2	.0	9	81	98	0	60	15	.0	125	7
10	24	61	13.3	9.6	8.3	.2	10	.7	1.1	.0	8	80	97	0	55	15	.0	127	7
10	31	61	11.7	10.3	8.2	.6	12	.7	1.1	.0	6	81	98	0	70	14	.3	113	-
11	7	61	13.0	10.5	8.2	.1	8	.4	1.3	.0	7	80	97	0	70	15	.0	120	-
11	14	61	11.2	11.0	8.1	.7	11	.4	1.0	.0	6	78	95	0	65	15	.0	118	8
11	21	61	10.3	11.6	8.1	.5	10	.4	1.1	.0	7	76	95	0	80	15	.0	119	10
11	28	61	10.3	12.1	8.1	.4	13	.8	2.0	.0	7	81	99	0	60	15	.1	122	-
12	5	61	8.9	12.1	8.2	.1	12	.3	1.0	.0	7	78	94	0	25	15	.0	115	12
12	12	61	8.0	13.1	8.0	.1	12	.5	1.1	.0	8	79	98	0	23	16	.0	118	67
12	19	61	5.0	14.3	8.0	.5	12	.4	.9	.0	7	79	96	0	14	15	.0	115	3
12	26	61	5.0	13.5	8.1	.7	9	.2	.5	.0	6	78	93	0	20	14	.0	113	3100
1	2	62	4.7	13.3	8.0	.3	11	.4	1.2	.0	8	80	97	0	3	15	.0	122	*3
1	9	62	3.9	13.7	8.0	.4	4	.5	.8	.0	7	79	97	0	3	15	.0	117	-
1	16	62	4.2	13.5	8.0	.2	3	.4	.9	.0	7	80	99	0	3	15	.0	117	*3
1	23	62	4.6	14.0	8.0	.1	12	.3	.4	.0	7	81	99	0	3	15	.0	128	*3
1	30	62	3.2	14.5	8.2	.2	10	.4	.9	.0	8	80	96	0	3	14	.0	120	*3
2	6	62	3.4	14.4	8.2	.6	9	.7	1.1	.0	8	80	98	0	2	15	.0	119	*3
2	12	62	4.0	14.0	8.1	.9	6	.3	.8	.0	8	80	96	0	2	15	.0	120	20
2	20	62	3.8	14.2	8.0	.1	8	.3	.6	.0	7	80	97	0	3	15	.0	123	13
2	27	62	4.4	13.7	8.1	.2	11	.3	.7	.0	7	84	101	0	2	15	.0	118	*3
3	6	62	4.9	14.9	8.1	1.0	10	.7	1.1	.0	11	87	103	0	2	15	.1	132	13
3	13	62	4.0	14.3	8.0	.4	5	.5	.9	.0	6	82	98	0	2	11	.0	117	*3
3	19	62	4.1	12.8	7.9	.8	12	.7	1.8	.1	8	78	95	0	15	14	.0	118	10
3	27	62	6.0	13.5	8.0	.3	10	.5	.9	.0	6	83	100	0	5	15	.0	120	10
4	3	62	6.4	13.4	8.1	.5	9	.4	.9	.0	6	81	97	0	3	14	.0	116	*3
4	10	62	7.1	13.0	8.0	.1	13	.4	.8	.0	7	81	95	0	3	13	.0	111	*3
4	17	62	4.2	12.8	7.9	.1	12	.1	.4	.0	8	78	98	0	45	17	.0	123	*3
4	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*3
5	1	62	13.3	11.4	8.4	.2	17	.6	1.4	.0	6	83	98	0	30	14	.0	128	7
5	8	62	12.6	11.2	8.2	.4	10	.5	.8	.0	6	82	99	0	37	14	.0	121	*3
5	15	62	14.4	11.2	8.2	.5	13	.3	.8	.0	6	82	98	0	15	14	.0	120	*3
5	22	62	17.0	10.3	8.4	.6	12	.4	1.3	.0	6	84	97	0	13	15	.0	130	*3
5	29	62	18.6	10.1	8.2	-	12	.2	2.7	.0	7	86	100	0	27	16	.0	133	-
6	5	62	18.3	9.7	8.5	.7	9	.5	1.4	.0	7	84	99	0	20	14	.0	120	33
6	12	62	18.2	9.2	8.3	.3	9	.5	1.1	.0	6	82	95	0	20	13	.1	117	27
6	19	62	19.6	9.0	8.3	.4	10	.6	1.6	.0	6	83	97	0	25	14	.0	126	73
6	26	62	21.7	8.7	8.4	.1	13	.4	1.7	.0	6	83	98	0	27	14	.0	120	*3

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. CLAIR-DETROIT RIVERS
STATION LOCATION DETROIT RIVER AT
DETROIT, MICHIGAN 15

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	3	62	20.6	8.5	8.3	–	9	.3	1.3	.0	6	82	98	0	35	14	.0	125	770
7	10	62	22.6	8.2	8.3	.4	8	.8	1.3	.0	6	82	95	0	30	14	.0	123	10
7	17	62	23.0	8.5	8.3	.3	9	.6	1.7	.0	6	83	96	0	30	14	.0	128	20
7	25	62	22.4	8.1	8.3	.3	8	.4	1.0	.0	5	82	98	0	30	15	.0	127	20
7	31	62	24.0	7.1	8.4	–	7	.4	1.7	.0	6	84	97	0	20	16	.0	125	20
8	7	62	22.3	8.2	8.4	.3	8	.4	1.2	.0	7	82	99	0	20	15	.0	129	25
8	14	62	22.6	8.3	8.3	.1	10	.5	1.6	.0	7	83	96	0	20	15	.0	115	10
8	21	62	22.0	8.4	8.4	.2	8	.4	1.2	.0	6	82	96	0	15	15	.1	136	10
8	28	62	23.3	8.0	8.3	.4	7	.4	1.3	.0	8	82	97	0	20	15	.0	131	25
9	4	62	23.2	7.8	8.3	.2	9	.5	1.4	.0	7	82	97	0	15	15	.0	122	10
9	11	62	21.3	8.6	8.3	.2	9	.4	1.4	.0	7	82	96	0	15	14	.0	128	670
9	18	62	20.5	8.8	8.3	.4	10	.3	1.3	.0	6	83	97	0	20	15	.0	131	10
9	25	62	17.5	9.4	8.2	.4	8	.3	.9	.0	6	82	98	0	18	15	.0	121	30

MEAN MONTHLY FLOW - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineers
U.S. Lake Survey

STATE	Michigan
MAJOR BASIN	Western Great Lakes
MINOR BASIN	St. Clair-Detroit Rivers
STATION LOCATION	Detroit River at Detroit, Michigan

October	November	December	January	February	March	April	May	June	July	August	September
187.000	185.000	183.000	156.000	143.000	182.000	190.000	190.000	194.000	192.000	190.000	189.000

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. CLAIR-DETROIT RIVERS
STATION LOCATION ST. CLAIR RIVER AT
PORT HURON, MICHIGAN 64

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	16	-	-	-	-	-	-	0	5	0	6	0	8						
10	9	61	10	27	-	-	-	-	-	-	1	5	3	6	4	8						
10	16	61	10	27	-	-	-	-	-	-	13	5	5	6	18	8						
10	23	61	11	2	0	0	2	1	2	1	4	4	11	5	15	6						
10	30	61	11	14	-	-	-	-	-	-	1	5	12	6	13	8						
11	6	61	11	22	-	-	-	-	-	-	0	4	7	4	7	6						
11	13	61	11	28	-	-	-	-	-	-	0	5	2	6	2	8						
11	20	61	12	4	-	-	-	-	-	-	1	6	6	6	7	8						
11	27	61	12	5	0	1	0	1	0	1	6	5	5	5	11	7						
12	11	61	12	19	-	-	-	-	-	-	1	5	3	6	4	8						
12	18	61	12	26	0	1	0	0	0	1	0	4	6	4	6	6						
1	3	62	1	15	-	-	-	-	-	-	3	4	3	5	6	6						
1	8	62	1	19	-	-	-	-	-	-	26	6	11	6	37	8						
1	15	62	1	26	-	-	-	-	-	-	6	4	15	5	21	6						
1	22	62	1	30	-	-	-	-	-	-	5	5	10	6	15	8						
1	29	62	2	6	-	-	-	-	-	-	2	5	7	6	9	7						
2	5	62	2	14	-	-	-	-	-	-	2	5	7	6	9	8						
2	19	62	3	2	-	-	-	-	-	-	4	5	12	6	16	8						
2	26	62	3	12	0	1	0	1	0	1	6	4	11	5	17	6						
3	5	62	3	16	-	-	-	-	-	-	3	4	5	5	8	6						
3	12	62	3	26	-	-	-	-	-	-	3	5	14	6	17	7						
3	19	62	4	3	-	-	-	-	-	-	3	5	9	6	12	7						
3	26	62	4	9	0	1	0	0	0	1	3	4	12	5	15	6						
4	2	62	4	19	-	-	-	-	-	-	5	5	9	6	14	7						
4	9	62	4	24	-	-	-	-	-	-	0	6	0	6	0	8						
4	16	62	4	30	-	-	-	-	-	-	15	7	11	7	26	10						
4	23	62	5	29	0	1	0	1	0	1	0	7	8	8	8	11						
4	30	62	6	1	-	-	-	-	-	-	7	7	15	8	22	11						
5	7	62	6	18	-	-	-	-	-	-	4	6	12	8	16	10						
5	14	62	5	14	-	-	-	-	-	-	6	5	10	7	16	9						
5	22	62	6	26	-	-	-	-	-	-	7	5	6	7	13	9						
5	28	62	6	28	0	0	0	0	0	0	1	5	7	6	8	8						
6	4	62	7	6	-	-	-	-	-	-	1	5	10	6	11	8						
6	11	62	7	11	-	-	-	-	-	-	5	5	16	7	21	9						
6	18	62	7	17	-	-	-	-	-	-	3	5	10	7	13	9						
6	25	62	8	1	0	0	1	1	1	1	6	6	11	8	17	10						
7	2	62	8	6	-	-	-	-	-	-	4	3	9	3	13	4						
7	9	62	8	6	-	-	-	-	-	-	1	3	7	4	8	5						
7	16	62	8	8	-	-	-	-	-	-	1	5	8	7	9	9						
7	23	62	9	29	0	0	0	1	0	1	68	7	9	7	77	10						
7	30	62	8	22	-	-	-	-	-	-	0	7	13	7	13	10						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. CLAIR-DETROIT RIVERS
STATION LOCATION ST. CLAIR RIVER AT
PORT HURON, MICHIGAN 64

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
8	6	62	8	28	-	-	-	-	-	-	3	5	14	6	17	7						
8	14	62	8	30	-	-	-	-	-	-	13	6	10	6	23	8						
8	20	62	9	11	-	-	-	-	-	-	4	6	8	7	12	9						
8	27	62	11	1	-	-	-	-	-	-	6	5	10	7	16	9						
9	4	62	9	28	-	-	-	-	-	-	1	5	5	7	6	9						
9	10	62	10	2	-	-	-	-	-	-	5	6	5	8	10	10						
9	17	62	10	16	-	-	-	-	-	-	6	5	6	6	12	7						
9	24	62	10	16	0	1	0	1	0	1	5	5	8	7	13	8						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MICHIGAN

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN ST. CLAIR DETROIT RIVERS

STATION LOCATION ST. CLAIR RIVER AT
PORT HURON, MICHIGAN 64

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	400	20	0	210	0	0	0	120	20	40	0																				
10	16	61	900	40	0	60	0	0	60	270	480	80	190	84	1	68	1																
10	30	61	600	40	0	170	20	0	60	120	150	60	20																				
11	20	61	1200	230	20	230	0	0	0	290	410	340	540	2	1	84	1	68	1														
12	4	61	200	0	0	40	0	0	0	80	40	40	80																				
12	18	61	900	0	0	40	0	740	0	50	50	70	90	57	3																		
1	[illegible]	62	400	0	0	70	0	0	20	50	250	50	160																				
1	15	62	200	0	0	20	0	20	0	60	100	40	20																				
2	5	62	500	0	0	20	0	0	0	140	340	0	50																				
2	19	62	400	0	0	0	0	20	20	20	340	0	90	82	1																		
3	5	62	700	20	0	0	0	510	0	70	130	90	180	57	2																		
3	19	62	200	0	0	0	0	0	0	70	160	0	90																				
4	9	62	800	0	0	60	0	40	170	230	310	20	60	62	1	92	1																
4	16	62	3500	0	0	540	20	20	110	830	1920	290	900	84	3	69	2	25	2	71	1	77	1	97	1	88	1	68	1	92	1		
5	7	62	2600	0	40	60	40	0	360	570	1480	400	550	92	3	63	1	68	1	71	1	88	1										
5	14	62	1200	0	20	0	0	0	630	0	550	40	550	62	3	92	1	93	1														
6	4	62	1500	0	230	60	0	0	130	300	800	80	420	92	2																		
6	11	62	900	0	0	60	0	360	60	80	300	0	40	57	2																		
7	2	62	400	0	0	0	0	0	20	130	210	130	80																				
7	16	62	200	0	0	20	0	20	0	110	90	70	200																				
8	6	62	300	0	0	110	0	0	130	80	0	80	130																				
8	20	62	200	0	0	0	0	0	20	130	80	80	80																				
9	4	62	400	0	0	40	0	0	170	130	80	130	80	62	1																		
9	17	62	200	10	0	40	0	0	0	110	80	40	110																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MICHIGAN

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN ST. CLAIR-DETROIT RIVERS

STATION LOCATION ST. CLAIR RIVER AT

PORT HURON, MICHIGAN 064

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																					
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH					NUMBER PER LITER	1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	47	64	25	9	46	6	95	4	17	0	0	46	17	2	11	2	22	1	21	1			10	51	2					0	0
10	16	61	47	45	46	30	48	11	6	2	12	0	0	10	11	1	17	1							17	51	3					0	0
10	30	61	47	69	25	11	56	9	95	9	2	0	0	8											0							0	0
11	20	61	46	23	47	22	48	14	25	9	32	110	0	10	11	1									7	51	1					0	0
12	4	61	47	31	25	24	95	14	56	8	23	0	0	0											9	77	1	76	1			0	0
12	18	61	46	22	25	18	95	11	9	7	42	0	0	10	11	1									15	76	3	77	1			0	0
1	3	62	25	16	45	13	95	9	47	8	54	20	0	4											2							0	0
1	15	62	45	47	95	24	35	6	47	6	17	0	10	15	11	1									11	76	1	77	1			0	0
2	5	62	95	20	25	10	45	9	35	8	53	0	0	0											0							0	0
2	19	62	35	31	45	14	95	12	77	8	35	0	0	3											6	76	1					0	0
3	5	62	95	41	46	12	35	9	9	8	30	0	0	8	14	1									2							0	0
3	19	62	95	33	47	18	46	11	35	9	29	0	0	5											3							0	0
4	9	62	95	40	47	14	89	13	25	6	27	0	0	16	14	2									2							0	0
4	16	62	95	20	48	17	46	10	47	7	46	0	0	2											0							0	0
5	7	62	95	31	47	13	46	11	92	8	37	0	0	17	14	1									6	51	1					0	1
5	14	62	95	38	92	15	47	13	45	7	27	0	0	12	14	1									16	50	2	76	1			0	0
6	4	62	95	39	92	20	47	9	45	4	28	0	0	10	11	1									3							0	0
6	11	62	95	58	92	9	25	7	91	6	20	0	0	42	11	3	17	1							2							0	0
7	2	62	95	39	47	17	92	14	25	9	21	130	0	151	11	5	7	2	17	2					47	51	4	76	2			0	0
7	16	62	30	25	25	23	47	15	24	8	29	0	0	121	11	4	10	3	2	1	15	1	1	1	21	51	3	50	2	76	1	1	1
8	6	62	47	31	30	21	25	16	24	11	21	0	0	18	11	1									9	50	1					0	3
8	20	62	25	30	24	12	46	12	30	10	36	0	0	34	11	2	5	1	17	1					7	76	2					0	0
9	4	62	24	27	30	19	47	14	25	12	28	0	0	36	11	2	17	2	5	1					9	50	1	76	1	77	1	0	0
9	17	62	25	66	24	12	47	6	49	3	13	0	0	96	11	3	17	3	5	3	22	1			15	51	3	76	1			0	0

687-228 O-63—20

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. CLAIR-DETROIT RIVERS
STATION LOCATION ST. CLAIR RIVER AT
PORT HURON, MICHIGAN 64

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END			TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY							TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS				
10	23	61	11	22	5510	185	38	147	3	10	10	1	1	7	1	3	2	1	9
11	22	61	12	18	5590	150	44	106	2	18	9	1	1	7	0	3	3	0	9
12	18	61	1	8	5660	109	31	78	2	11	7	1	1	5	0	3	2	1	5
1	30	62	2	20	5380	130	28	102	1	11	8	0	0	8	0	3	1	1	3
3	13	62	4	3	5240	156	38	118	3	14	8	1	0	6	1	4	3	1	5
4	19	62	5	15	5730	177	71	106	4	26	14	1	1	12	0	7	6	1	13
6	10	62	7	4	5130	160	61	99	3	22	12	1	1	8	2	5	5	1	13
7	31	62	8	20	5350	138	29	109	1	8	9	1	0	7	1	2	2	1	6
9	10	62	10	1	6210	141	40	101	2	14	7	1	0	6	0	3	3	1	10

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. CLAIR-DETROIT RIVERS
STATION LOCATION ST. CLAIR RIVER AT
PORT HURON, MICHIGAN 64

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	17.0	9.5	8.0	.2	22	-	-	.1	6	82	102	0	0	14	-	108	60
10	9	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*2
10	16	61	15.0	9.6	8.0	.2	20	-	-	.5	9	84	100	0	0	11	-	96	12
10	23	61	13.0	9.9	7.9	1.1	17	-	-	.1	6	82	104	0	0	12	-	100	-
10	30	61	14.0	9.5	7.9	.1	6	-	-	.1	7	82	96	0	0	12	-	136	-
11	13	61	11.0	10.2	7.9	2.0	0	-	-	.1	6	80	90	0	0	12	.1	120	6
11	20	61	9.0	10.8	7.9	2.1	5	-	-	.1	6	82	96	0	0	11	.0	104	-
11	27	61	8.5	11.1	7.7	2.3	18	-	-	.1	7	84	100	0	0	11	.1	104	-
12	4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	19	.0	-	-
12	8	61	9.0	10.9	7.9	.9	-	-	-	.1	6	88	96	0	0	13	-	100	-
12	11	61	6.0	11.1	7.9	2.5	-	-	-	.1	6	88	96	0	0	9	-	100	-
12	18	61	4.5	12.3	7.9	4.3	-	-	-	.1	7	82	96	0	0	17	.1	108	-
1	3	62	2.0	13.5	7.7	5.0	14	-	-	.1	6	84	98	0	0	18	.0	112	-
1	8	62	1.0	13.6	7.7	3.7	8	-	-	.1	6	84	98	0	0	9	.0	112	*2
1	15	62	1.5	13.8	8.0	3.3	10	-	-	.1	8	84	98	0	0	10	.0	120	*2
1	22	62	-	-	-	-	-	-	-	-	-	-	-	-	-	16	.0	-	2
1	29	62	1.0	14.0	7.9	2.5	6	-	-	.1	7	84	94	0	0	10	.0	101	*2
2	5	62	1.0	13.9	8.0	4.0	10	-	-	.1	7	82	90	0	1	10	.0	115	-
2	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
2	19	62	1.0	14.4	8.0	-	-	-	-	.1	8	82	100	0	2	12	-	100	*2
2	26	62	1.0	14.4	8.3	5.3	-	-	-	-	-	88	102	0	1	10	-	108	*2
3	5	62	1.5	14.0	8.0	-	-	-	-	.1	-	86	102	0	2	10	-	112	*2
3	19	62	2.0	14.5	8.2	-	-	-	-	.1	-	82	104	0	2	11	-	124	20
3	27	62	2.5	13.8	8.1	1.4	-	-	-	.1	5	72	96	0	2	9	-	102	*2
4	2	62	3.0	12.5	8.2	1.3	-	-	-	.1	5	72	96	0	1	10	.0	110	-
4	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
4	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*2
4	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	*100
4	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	2
4	30	62	7.0	12.1	8.2	-	-	-	-	.1	7	84	94	5	4	9	.0	-	2
5	7	62	10.0	11.5	8.2	1.0	-	-	-	.1	5	84	94	6	8	10	-	112	12
5	15	62	11.0	11.7	8.2	1.0	-	-	-	.1	6	88	98	5	4	12	-	120	-
5	22	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	3
5	28	62	11.0	11.5	8.3	1.0	-	-	-	.1	7	84	94	3	2	10	-	120	*2
6	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25
6	6	62	15.0	11.4	8.2	.6	-	-	-	.1	8	84	94	5	3	9	-	-	-
6	11	62	15.0	11.4	8.2	.4	-	-	-	.1	6	84	96	5	3	9	.0	126	12
6	18	62	16.0	10.3	8.3	.4	-	-	-	.1	6	88	94	0	1	9	-	152	90
6	25	62	17.0	10.0	8.3	.5	-	-	-	.1	5	92	96	4	7	12	-	-	6

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. CLAIR-DETROIT RIVERS
STATION LOCATION ST. CLAIR RIVER AT
PORT HURON, MICHIGAN 64

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	2	62	20.0	9.5	8.3	.4	-	-	-	.1	6	82	98	4	1	11	-	-	8
7	9	62	19.0	9.9	8.3	.4	-	-	-	.1	12	88	98	5	6	10	.0	-	6
7	16	62	20.0	8.5	8.3	-	-	-	-	.1	6	88	98	5	8	9	.0	100	40
7	23	62	21.0	8.9	8.3	.3	-	-	-	.1	10	90	96	7	15	11	-	124	22
7	30	62	20.0	9.3	8.2	.5	-	-	-	.1	11	88	96	2	4	10	-	100	14
8	6	62	20.0	9.0	8.2	.3	-	-	-	.1	12	88	100	6	4	11	.0	104	10
8	14	62	20.0	8.7	8.3	.2	-	-	-	.1	11	90	96	12	21	10	-	-	20
8	20	62	20.0	9.0	8.2	.4	-	-	-	.1	7	90	96	5	6	10	-	-	6
8	27	62	20.5	8.7	8.2	.8	-	.1	-	-	7	88	96	2	4	11	-	-	10
9	4	62	21.0	8.7	8.2	.2	-	-	-	.1	7	90	96	5	4	9	-	104	2
9	10	62	19.5	9.1	8.3	.4	-	-	-	.1	6	90	98	5	4	8	-	118	8
9	17	62	19.5	9.2	8.3	.5	-	-	-	.1	6	90	98	5	2	8	.0	100	10
9	24	62	17.0	9.7	8.3	.9	-	-	-	.1	7	90	100	5	2	10	-	102	8

MEAN MONTHLY FLOW - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineers
U.S. Lake Survey

STATE	Michigan
MAJOR BASIN	Western Great Lakes
MINOR BASIN	St. Clair-Detroit Rivers
STATION LOCATION	St. Clair River at Port Huron, Michigan

October	November	December	January	February	March	April	May	June	July	August	September
184.000	181.000	178.000	143.000	143.000	178.000	186.000	189.000	193.000	192.000	189.000	187.000

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE INDIANA
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. JOSEPH RIVER
STATION LOCATION LAKE MICHIGAN AT
GARY, INDIANA

17

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	3	61	10	13	-	-	-	-	-	-	0	5	15	7	15	9						
10	10	61	11	1	0	1	2	1	2	1	2	4	8	5	10	6						
10	17	61	10	31	-	-	-	-	-	-	1	5	4	7	5	9						
10	24	61	11	3	-	-	-	-	-	-	0	6	6	7	6	9						
10	31	61	11	20	-	-	-	-	-	-	3	4	2	5	5	6						
11	21	61	11	28	-	-	-	-	-	-	11	5	8	7	19	9						
11	28	61	12	5	1	1	0	1	1	1	18	6	12	7	30	9						
12	5	61	12	12	-	-	-	-	-	-	19	6	14	7	33	9						
12	12	61	12	18	0	1	0	1	0	1	5	4	13	6	18	7						
12	19	61	12	28	-	-	-	-	-	-	4	5	10	7	14	9						
1	9	62	1	17	0	1	0	1	0	1	25	5	12	5	37	7						
1	16	62	1	24	-	-	-	-	-	-	16	4	16	5	32	6						
1	23	62	1	30	-	-	-	-	-	-	2	5	15	7	17	9						
1	30	62	2	7	-	-	-	-	-	-	7	6	14	7	21	9						
2	6	62	2	14	-	-	-	-	-	-	19	6	10	7	29	8						
2	13	62	2	23	0	0	0	1	0	1	6	4	8	5	14	6						
2	20	62	3	2	-	-	-	-	-	-	0	5	0	6	0	8						
2	27	62	3	7	-	-	-	-	-	-	6	4	9	5	15	6						
3	6	62	3	16	-	-	-	-	-	-	4	4	11	5	15	6						
3	13	62	3	20	0	0	0	1	0	1	6	6	15	7	21	9						
3	20	62	3	30	-	-	-	-	-	-	32	4	10	7	42	8						
3	27	62	4	6	-	-	-	-	-	-	6	5	10	7	16	9						
4	3	62	4	12	-	-	-	-	-	-	10	6	3	6	13	9						
4	10	62	4	20	0	0	0	0	0	0	14	4	5	5	19	6						
4	17	62	4	27	-	-	-	-	-	-	8	6	7	7	15	9						
4	24	62	5	23	-	-	-	-	-	-	3	7	7	8	10	11						
4	30	62	6	25	-	-	-	-	-	-	2	4	9	6	11	7						
5	1	62	6	21	-	-	-	-	-	-	11	6	19	7	30	9						
5	14	62	6	20	0	0	12	1	12	1	2	5	8	7	10	9						
5	22	62	6	26	-	-	-	-	-	-	2	6	3	8	5	10						
5	29	62	6	29	-	-	-	-	-	-	1	3	10	4	11	5						
6	5	62	7	3	-	-	-	-	-	-	8	5	12	7	20	9						
6	12	62	7	11	0	0	1	1	1	1	5	5	11	7	16	9						
6	19	62	7	16	-	-	-	-	-	-	12	5	7	8	19	9						
6	26	62	8	2	-	-	-	-	-	-	2	6	8	7	10	9						
7	3	62	8	6	-	-	-	-	-	-	34	6	43	7	77	9						
7	17	62	8	10	0	0	0	1	0	1	0	5	14	7	14	9						
7	24	62	8	14	-	-	-	-	-	-	3	5	14	7	17	8						
7	31	62	8	22	-	-	-	-	-	-	0	7	4	6	4	9						
8	7	62	8	27	-	-	-	-	-	-	3	7	8	8	11	11						
8	14	62	8	29	0	1	0	1	0	1	6	6	12	7	18	9						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE INDIANA
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. JOSEPH RIVER
STATION LOCATION LAKE MICHIGAN AT
GARY, INDIANA 17

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
8	21	62	9	5	-	-	-	-	-	-	3	5	11	7	14	9						
8	28	62	10	1	-	-	-	-	-	-	2	5	9	8	11	9						
9	4	62	10	2	-	-	-	-	-	-	1	5	5	7	6	9						
9	11	62	9	28	0	0	0	1	0	1	3	6	16	8	19	10						
9	25	62	10	10	-	-	-	-	-	-	8	7	20	8	28	11						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE INDIANA
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. JOSEPH RIVER
STATION LOCATION LAKE MICHIGAN AT
GARY, INDIANA

17

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	3	61	800	20	0	20	0	40	0	230	480	40	80	92	1	87	1																
10	17	61	600	0	0	20	0	0	0	120	460	40	210	93	1																		
10	31	61	900	20	0	40	0	0	0	250	620	20	80	77	2	71	1	87	1														
11	19	61	2400	40	0	20	0	0	0	520	1840	230	560	77	2	84	2	93	2	69	1	80	1										
11	21	61	1900	0	0	60	120	0	0	370	1390	60	170	77	3	93	1	71	1														
12	5	61	1400	60	0	20	0	20	60	250	1010	80	310	93	2	77	1																
12	19	61	1100	0	0	20	20	0	0	270	790	60	170	93	2	68	1																
1	9	62	1700	0	0	0	0	0	0	580	1120	980	3100	71	2	93	2	92	2	77	1												
1	16	62	1900	20	0	20	0	20	20	850	950	310	660	71	2	93	2																
2	6	62	5500	0	70	0	0	70	20	1980	3380	830	450	71	4	69	2	80	2	92	2												
2	20	62	1800	0	0	130	0	0	0	990	640	170	80	93	2	69	1	71	1														
3	6	62	1000	0	0	0	0	40	0	810	150	60	60	71	3																		
3	20	62	3400	0	0	60	0	20	0	3150	190	540	100	71	5	69	1																
4	3	62	4100	0	0	40	0	80	120	1950	1880	750	410	71	4	92	3	69	2	84	1	77	1										
4	17	62	7500	0	0	180	0	20	140	3750	3410	1040	1060	71	5	92	4	77	3	84	1	93	1	69	1	82	1	88	1	25	1		
5	1	62	3900	0	60	190	0	60	190	970	2380	170	640	92	4	93	1	71	3	25	1	77	1	68	1	88	1						
5	15	62	1900	0	0	0	0	0	0	820	1080	360	380	71	3	92	2	93	1	84	1												
6	5	62	1900	0	60	0	40	20	0	380	1370	150	490	92	3	71	1																
6	19	62	3700	0	20	20	0	20	500	850	2260	210	190	92	4	71	3	61	2	93	1	88	1	77	1								
7	3	62	4100	0	0	0	40	0	40	250	3710	80	80	93	4	92	2	84	1	69	1												
7	17	62	500	0	0	90	0	20	0	50	340	50	270																				
8	7	62	600	0	0	60	0	60	0	40	420	80	80	93	1																		
8	21	62	500	40	0	130	0	0	0	0	380	0	20	93	1																		
9	4	62	1100	0	0	80	0	100	150	170	620	120	0	93	1	77	1																
9	18	62	300	0	0	10	0	0	10	0	250	40	320																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE INDIANA
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. JOSEPH RIVER
STATION LOCATION LAKE MICHIGAN AT
GARY, INDIANA 017

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	3	61	95	44	56	22	47	10	82	8	16	120	0	14	22	1									1							0	0
10	17	61	95	47	47	33	56	5	60	3	12	0	0	13											1							0	0
10	31	61	95	39	47	23	56	16	45	6	16	0	0	8	20	1									8	51	2					0	0
11	19	61	95	43	47	19	45	10	49	7	21	0	0	12											1							0	0
11	21	61	95	54	47	10	9	9	45	5	22	0	0	2											2							2	0
12	5	61	95	73	47	8	21	4	49	2	13	0	0	23	11	1	14	1							2							0	0
12	19	61	95	81	47	7	96	5	92	3	4	0	0	8											3							0	0
1	9	62	95	87	47	4	56	2	49	2	5	0	0	5											5	76	1					0	0
1	16	62	95	59	60	11	47	10	82	5	15	0	0	10	11	1									9	76	1	77	1			0	0
2	6	62	95	51	60	26	80	4	21	3	16	0	0	5											6	76	1					0	0
2	20	62	95	31	60	15	59	9	92	7	38	60	0	39	46	3	47	1							8	76	2					0	0
3	6	62	95	29	82	26	60	22	47	10	13	0	0	35	46	2	47	1							2							0	0
3	20	62	82	54	95	19	92	6	60	6	15	0	0	26	14	3									1							0	0
4	3	62	82	27	95	18	47	12	84	10	33	0	0	29	14	2	11	1							0							0	0
4	17	62	82	26	47	17	95	15	92	11	31	0	0	148	14	4	11	4	15	1					4	50	1					1	0
5	1	62	47	36	92	23	95	15	80	4	22	20	0	22	15	2	6	1							0							0	0
5	15	62	47	31	95	18	89	13	82	12	26	0	0	30	15	3									1							0	0
6	5	62	95	52	47	19	92	13	89	6	10	0	0	43	15	3									1							0	0
6	19	62	95	71	92	17	82	2	35	2	8	0	0	279	17	5	11	5	10	2	46	2	15	1	8	51	1	76	1			0	0
7	3	62	95	71	47	13	92	7	89	2	7	80	0	170	11	5	17	4	1	1					18	76	1	51	1			0	0
7	17	62	95	64	47	15	56	4	92	3	14	70	0	183	11	5	16	4	15	3	5	2	17	1	37	51	4	76	1	50	1	0	0
8	7	62	95	70	47	9	24	4	56	3	14	0	0	81	17	3	11	2	15	1	21	1			12	51	3					0	0
8	21	62	45	35	95	28	47	24	56	6	7	0	0	162	17	5	21	3	15	3	11	2			28	52	3	76	2	51	2	3	0
9	4	62	95	73	45	8	47	7	24	3	9	0	0	226	11	5	17	4	16	1					0							0	0
9	18	62	95	69	47	17	56	3	80	2	9	0	0	100	11	4	22	2	15	1	17	1			3	51	1					0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE INDIANA
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. JOSEPH RIVER
STATION LOCATION LAKE MICHIGAN AT
GARY, INDIANA

17

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	3	61	10	10	5060	142	25	117	-	-	-	-	-	-	-	-	-	-	-
11	7	61	11	16	5000	176	50	126	-	-	-	-	-	-	-	-	-	-	-
11	7	61		*	10060	160	38	122	3	9	12	2	1	9	0	5	3	1	5
1	2	62	1	12	5140	121	33	88	-	-	-	-	-	-	-	-	-	-	-
2	6	62	2	15	5470	89	21	68	-	-	-	-	-	-	-	-	-	-	-
3	6	62	3	15	5210	127	36	91	-	-	-	-	-	-	-	-	-	-	-
3	6	62		*	15820	112	30	82	2	7	12	2	2	8	0	4	1	1	3
4	3	62	4	12	4940	110	30	80	-	-	-	-	-	-	-	-	-	-	-
5	1	62	5	10	5020	94	41	53	-	-	-	-	-	-	-	-	-	-	-
6	5	62	6	15	4980	91	39	52	-	-	-	-	-	-	-	-	-	-	-
6	5	62		*	14940	99	37	62	2	11	13	2	1	8	2	5	2	1	3
7	3	62	7	12	5270	117	45	72	-	-	-	-	-	-	-	-	-	-	-
8	7	62	8	16	5060	139	45	94	-	-	-	-	-	-	-	-	-	-	-
9	5	62	9	12	4810	129	36	93	-	-	-	-	-	-	-	-	-	-	-
9	5	62		*	15140	128	42	86	1	11	13	1	1	10	1	5	3	1	8

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE INDIANA
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. JOSEPH RIVER
STATION LOCATION LAKE MICHIGAN AT
GARY, INDIANA 17

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORM/ per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	11.1	7.4	8.0	-	12	.9	-	.0	8	107	136	0	5	18	.0	183	90
10	10	61	13.9	8.0	8.0	.3	12	.7	2.2	.0	10	109	132	0	4	22	.0	148	290
10	17	61	14.6	9.4	8.1	.4	12	.9	2.2	.0	10	112	136	0	9	22	.0	150	38
10	24	61	14.0	9.2	8.0	.9	13	1.2	2.5	.0	10	112	132	5	13	20	.0	147	170
10	31	61	12.9	10.2	8.0	.5	14	1.2	-	.0	10	112	132	5	9	22	.0	153	56
11	7	61	11.1	10.6	8.1	.7	14	1.5	2.5	.0	9	113	140	5	5	18	-	156	200
11	14	61	10.2	10.7	7.9	1.3	13	1.5	3.6	.1	11	110	140	10	11	30	-	183	720
11	21	61	8.3	11.3	8.3	.9	10	1.0	2.9	.0	10	113	140	5	15	22	-	166	*2
11	28	61	7.9	11.3	8.0	.7	16	1.6	3.2	.1	9	113	140	10	53	22	-	153	580
12	5	61	7.0	12.0	8.2	.4	11	.8	2.2	.0	9	120	136	10	27	22	.1	158	20
12	12	61	4.9	12.5	8.0	.7	13	1.5	3.3	.1	10	116	140	0	10	24	.0	162	10
12	19	61	2.9	13.2	7.8	.7	13	1.5	3.2	.0	10	116	140	10	9	28	.0	156	-
1	9	62	2.0	14.1	7.9	.5	15	2.2	4.4	.0	10	113	140	10	20	22	.0	175	*2
1	16	62	1.5	13.4	8.0	1.3	14	3.9	4.5	2.4	10	120	144	5	19	36	.0	174	40
1	22	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
1	23	62	1.8	13.9	8.0	1.1	26	1.5	3.3	.1	8	124	144	5	15	26	.0	186	-
1	30	62	1.6	14.5	8.0	1.3	18	1.2	2.3	.1	10	124	148	10	15	24	.0	161	420
2	6	62	1.7	14.5	8.1	1.2	18	.8	2.3	.0	10	128	148	25	28	22	.2	164	130
2	13	62	2.1	14.6	8.1	.3	17	.6	2.3	.0	10	124	144	5	12	19	.0	155	*2
2	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80
2	20	62	1.9	14.2	8.0	1.0	15	1.3	3.3	.1	10	126	140	5	7	28	.0	173	-
2	27	62	2.2	14.5	8.1	.7	13	1.2	3.7	.1	10	128	144	5	8	26	.1	165	200
3	6	62	2.3	14.4	7.9	1.2	16	3.4	5.1	.1	10	128	148	10	11	32	.0	178	120
3	13	62	2.3	14.5	8.1	.5	31	1.2	3.4	.0	12	130	144	10	8	28	.0	168	2
3	20	62	2.7	13.8	8.1	.7	14	2.8	4.6	.0	10	138	148	15	11	26	.0	186	14
3	27	62	3.9	13.7	8.2	.9	18	1.2	3.2	.0	8	139	140	10	15	25	.0	161	54
4	3	62	4.8	13.1	8.1	.8	19	1.1	2.9	.0	10	132	144	10	12	22	.0	151	6
4	10	62	6.4	11.8	8.0	1.1	20	1.5	3.7	.4	10	116	136	15	12	31	.1	161	360
4	17	62	6.1	12.4	8.2	.5	20	1.4	3.4	.3	8	124	131	10	20	22	.0	160	8
4	24	62	7.9	12.2	8.2	.7	13	.8	2.8	.0	8	124	130	5	14	19	.2	161	38
5	1	62	9.2	12.0	8.0	.1	18	.8	2.3	.0	9	124	131	5	2	18	.1	151	6
5	8	62	12.1	10.5	8.0	1.0	18	.5	2.9	.1	8	123	128	5	7	22	.0	155	40
5	15	62	11.8	10.4	8.0	.4	17	.4	3.0	.0	10	124	130	0	4	22	.0	162	4
5	22	62	14.2	9.9	8.1	1.0	15	.4	2.9	.1	7	123	126	5	3	22	.0	158	44
5	29	62	13.1	10.5	8.1	.4	19	.4	-	.1	10	125	130	5	4	17	.0	145	340
6	5	62	14.3	10.1	8.0	.3	18	.7	2.8	.1	9	123	126	5	5	24	.0	152	200
6	12	62	17.4	9.0	8.1	1.4	29	1.0	3.2	.1	10	127	129	30	25	26	-	151	300
6	19	62	17.3	9.1	8.1	1.7	17	.8	3.0	.0	8	124	129	5	7	18	-	173	520
6	26	62	16.3	7.8	8.0	-	19	.4	2.9	.0	10	127	128	10	8	24	-	156	150

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE INDIANA
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. JOSEPH RIVER
STATION LOCATION LAKE MICHIGAN AT
GARY, INDIANA

17

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	3	62	14.0	8.8	8.0	2.0	18	.8	-	.2	9	127	128	5	5	32	-	157	30
7	10	62	21.6	7.8	8.3	.4	17	.4	1.9	.2	9	126	125	5	5	22	-	168	200
7	17	62	20.9	8.1	8.2	.8	13	.8	2.3	.1	9	125	126	5	7	24	.1	156	420
7	24	62	21.7	6.8	8.1	1.1	14	.7	2.9	.3	7	126	127	10	5	20	.2	168	46
7	31	62	21.1	7.6	8.3	.7	15	.4	2.3	.1	10	122	127	5	3	20	.1	158	250
8	7	62	20.0	6.5	8.2	.4	14	.8	3.2	.1	6	124	132	5	1	22	-	153	50
8	14	62	22.5	7.3	8.2	1.0	11	1.3	3.8	.3	11	124	130	10	15	22	.0	144	20
8	21	62	22.3	7.2	8.3	.5	11	1.2	3.2	.0	7	122	130	5	3	24	.0	174	56
8	28	62	20.4	7.0	8.1	.6	12	1.3	3.2	.1	7	118	128	5	3	27	.0	155	16
9	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60
9	4	62	13.2	7.9	8.0	1.1	13	1.0	2.5	.1	6	124	131	5	4	23	.0	161	-
9	11	62	18.3	7.9	8.1	.6	18	1.2	2.2	.1	6	122	129	5	4	27	.0	151	36
9	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150
9	25	62	18.3	9.2	8.2	.8	22	1.3	2.5	.1	6	122	135	5	6	24	-	160	140

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineers
U.S. Lake Survey

STATE	Indiana
MAJOR BASIN	Western Great Lakes
MINOR BASIN	St. Joseph River
STATION LOCATION	Lake Michigan at Gary, Indiana

October	November	December	January	February	March	April	May	June	July	August	September

FLOW DATA NOT APPLICABLE --- LAKE LEVELS ONLY

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE WISCONSIN

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN LAKE MICHIGAN-WESTERN SHORE

STATION LOCATION LAKE MICHIGAN AT

MILWAUKEE, WISCONSIN 65

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	12	-	-	-	-	-	-	6	5	11	7	17	9						
10	9	61	10	24	-	-	-	-	-	-	2	5	4	7	6	9						
10	11	61	10	27	0	0	1	1	1	1	0	4	10	5	10	6						
10	23	61	11	1	0	1	0	1	0	1	4	4	3	5	7	6						
10	30	61	11	6	-	-	-	-	-	-	14	5	9	6	23	8						
11	6	61	11	17	-	-	-	-	-	-	3	5	4	6	7	8						
11	13	61	11	27	-	-	-	-	-	-	13	5	8	6	21	8						
11	20	61	11	28	0	1	0	1	0	1	6	5	16	7	22	9						
11	27	61	12	4	-	-	-	-	-	-	6	5	10	7	16	9						
12	4	61	12	12	-	-	-	-	-	-	9	5	11	6	20	8						
12	11	61	12	19	-	-	-	-	-	-	0	6	5	7	5	9						
12	18	61	12	27	0	0	1	1	1	1	1	4	10	5	11	6						
1	2	62	1	12	-	-	-	-	-	-	6	5	3	6	9	8						
1	8	62	1	24	-	-	-	-	-	-	20	6	8	5	28	8						
1	15	62	1	24	0	1	0	1	0	1	4	6	6	6	10	8						
1	22	62	1	31	-	-	-	-	-	-	3	5	6	6	9	7						
1	29	62	2	7	-	-	-	-	-	-	0	5	9	7	9	9						
2	5	62	2	13	-	-	-	-	-	-	0	5	9	6	9	7						
2	12	62	2	20	-	-	-	-	-	-	4	4	7	5	11	7						
2	19	62	3	1	1	1	1	1	2	1	8	5	12	5	20	7						
2	26	62	3	9	-	-	-	-	-	-	7	5	8	7	15	9						
3	5	62	3	14	-	-	-	-	-	-	5	5	1	6	6	7						
3	12	62	3	20	-	-	-	-	-	-	2	4	8	5	10	6						
3	19	62	3	30	1	1	1	1	2	1	3	4	9	5	12	6						
3	26	62	4	5	-	-	-	-	-	-	0	5	11	7	11	9						
4	2	62	4	16	-	-	-	-	-	-	20	5	14	7	34	9						
4	9	62	4	25	-	-	-	-	-	-	10	5	11	7	21	8						
4	16	62	5	1	0	1	0	1	0	1	6	5	3	7	9	9						
4	23	62	5	23	-	-	-	-	-	-	6	7	1	8	7	11						
4	30	62	6	19	-	-	-	-	-	-	2	5	5	7	7	9						
5	7	62	6	8	-	-	-	-	-	-	6	7	8	8	14	11						
5	14	62	7	19	-	-	-	-	-	-	3	6	9	7	12	9						
5	21	62	6	27	0	0	0	0	0	0	5	5	6	7	11	9						
5	28	62	6	27	-	-	-	-	-	-	3	5	7	7	10	9						
6	4	62	7	3	-	-	-	-	-	-	2	5	6	6	8	8						
6	11	62	7	5	-	-	-	-	-	-	3	6	4	7	7	9						
6	18	62	7	14	0	0	1	1	1	1	2	3	6	4	8	5						
6	25	62	7	18	-	-	-	-	-	-	0	5	10	7	10	9						
7	2	62	8	10	-	-	-	-	-	-	3	3	9	3	12	4						
7	16	62	8	2	0	0	0	1	0	1	3	5	11	7	14	9						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE WISCONSIN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN LAKE MICHIGAN-WESTERN SHORE
STATION LOCATION LAKE MICHIGAN AT
MILWAUKEE, WISCONSIN 65

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	25	62	10	1	-	-	-	-	-	-	6	5	3	7	9	8						
7	30	62	8	21	-	-	-	-	-	-	6	5	18	7	24	9						
8	6	62	8	17	-	-	-	-	-	-	2	5	8	7	10	9						
8	13	62	8	30	-	-	-	-	-	-	3	5	9	7	12	8						
8	20	62	8	31	0	1	0	1	0	1	4	5	6	7	10	9						
8	27	62	9	10	-	-	-	-	-	-	3	5	21	7	24	9						
9	10	62	9	21	0	1	1	1	1	1	2	6	8	8	10	10						
9	17	62	10	4	0	0	0	1	0	1	1	6	9	8	10	10						
9	24	62	11	1	-	-	-	-	-	-	1	5	6	7	7	9						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WISCONSIN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN LAKE MICHIGAN-WESTERN SHORE
STATION LOCATION LAKE MICHIGAN AT
MILWAUKEE, WISCONSIN 65

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	400	20	0	20	0	20	0	290	80	60	120																				
10	16	61	800	0	0	20	0	0	0	170	580	40	150	93	1																		
11	6	61	400	40	20	20	0	0	20	60	250	40	100																				
11	20	61	600	20	0	0	0	50	20	340	160	160	90	71	1																		
12	4	61	300	0	0	0	0	0	0	170	170	40	80																				
12	18	61	600	0	0	20	0	0	0	360	230	20	110	71	1																		
1	2	62	500	0	0	20	0	20	20	230	190	20	170	71	1																		
1	15	62	900	0	0	40	0	0	0	290	560	80	100	84	1	93	1																
2	5	62	1100	0	0	0	0	0	0	740	340	90	0	71	2	84	1																
2	19	62	4800	210	40	80	0	0	60	1500	2870	350	290	84	3	69	1	3	1	93	1	71	1										
3	5	62	400	0	0	40	0	0	0	320	60	0	60	71	1																		
3	19	62	1900	40	0	100	0	40	20	1660	80	210	80	71	4																		
4	2	62	900	0	0	0	0	20	20	600	230	60	100	71	2																		
4	16	62	500	0	0	0	0	0	20	160	310	20	110	71	1	92	1																
5	7	62	1700	0	0	80	0	0	40	950	650	60	40	71	3	92	2																
5	21	62	4200	0	230	60	40	20	0	2050	1840	970	440	71	4	92	3	17	1														
6	4	62	4200	0	110	20	0	0	40	3500	570	460	300	71	5	92	1																
6	18	62	1600	0	0	0	0	0	0	970	630	80	170	71	3	92	1	93	1														
7	2	62	600	0	0	80	0	0	20	150	370	20	40	93	2	92	2	84	1														
7	16	62	1900	250	0	70	0	0	0	650	970	230	0	92	3	69	3	2	1														
8	6	62	2200	0	0	210	0	150	80	700	1100	120	170	89	3	71	3																
8	20	62	500	0	0	0	0	0	0	40	420	0	80	93	1																		
9	4	62	600	0	0	40	0	0	80	120	370	40	40	93	1																		
9	17	62	2400	0	80	40	0	0	80	630	1520	250	210	68	2	77	1	93	1	69	1												

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WISCONSIN

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN LAKE MICHIGAN-WESTERN SHORE

STATION LOCATION LAKE MICHIGAN AT

MILWAUKEE, WISCONSIN 065

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																		
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	95	54	47	33	9	2	89	2	9	410	0	74	11	3	17	3	22	1					3	76	1					0	0
10	16	61	95	70	47	14	45	2	96	2	12	0	0	5											3							0	0
11	6	61	95	72	47	9	35	5	60	2	12	0	0	16	11	1									3							0	0
11	20	61	95	62	47	15	82	9	60	4	10	0	0	21	11	2									1							0	0
12	4	61	95	51	47	13	60	7	48	6	23	0	0	8	11	1									5							0	0
12	18	61	95	36	47	33	82	10	60	6	15	0	0	1											1							0	0
1	2	62	95	27	60	18	47	16	82	9	30	0	0	3											3	76	1					0	0
1	15	62	48	19	95	15	60	12	84	7	47	0	0	0											4	51	1					0	0
2	5	62	82	13	47	12	46	10	92	9	56	0	0	2											2							0	0
2	19	62	95	14	48	12	60	12	46	7	55	190	0	0											1							0	0
3	5	62	60	27	92	17	47	13	95	11	32	0	0	0											0							0	0
3	19	62	92	25	60	18	47	17	84	7	33	40	0	3											3							0	0
4	2	62	47	26	92	25	82	12	49	9	28	0	0	0											2							0	0
4	16	62	48	24	82	20	92	11	47	9	36	0	0	2											4							1	0
5	7	62	47	31	92	20	95	10	91	6	33	0	0	2											3							0	0
5	21	62	47	38	95	19	92	17	82	9	17	0	0	7											7	50	1					0	0
6	4	62	82	56	95	13	47	9	92	7	15	0	0	14											6	50	1					0	0
6	18	62	95	24	89	19	82	19	47	16	22	0	0	12	21	1									38	76	4	50	1			0	0
7	2	62	95	31	92	17	47	15	17	10	27	0	0	138	11	4	17	3	10	2	21	1			8	76	1	50	1			0	0
7	16	62	82	43	47	32	92	12	95	11	2	0	0	909	11	7	17	6	10	3	21	3	5	1	16	50	1	76	1	77	1	0	0
8	6	62	95	36	47	29	82	21	89	6	8	0	0	604	17	6	11	6	10	4	2	1			60	50	4	76	3	51	3	0	2
8	20	62	95	74	47	17	92	2	35	2	5	0	0	365	11	6	17	5	10	4	21	3	46	2	152	50	5	51	5	76	3	0	0
9	4	62	95	66	47	17	25	5	35	3	9	0	0	141	11	5	17	3	10	2					129	50	5	51	3	77	3	3	0
9	17	62	95	76	25	6	47	6	35	2	10	0	0	162	11	5	17	4	22	1	10	1	21	1	75	50	4	54	3	77	3	0	0

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NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE WISCONSIN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN LAKE MICHIGAN WESTERN SHORE
STATION LOCATION LAKE MICHIGAN AT
MILWAUKEE, WISCONSIN 65

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	13	61	11	24	5788	103	24	79	2	7	6	0	0	5	1	2	1	0	6
12	20	61	1	2	5490	92	19	73	1	6	5	0	0	5	0	2	1	1	3
1	23	62	2	5	5190	121	21	100	1	8	5	1	0	4	0	1	1	0	5
2	16	62	3	6	5199	125	23	102	4	6	4	1	1	2	0	2	2	0	5
3	28	62	4	17	4940	152	42	110	4	11	10	1	1	8	0	5	4	0	8
4	27	62	5	24	5044	136	49	87	3	18	10	1	1	8	0	4	5	0	9
6	15	62	7	6	5300	120	31	89	1	10	8	2	1	5	0	2	2	1	7
7	26	62	8	9	5007	146	39	107	1	15	11	1	1	8	1	3	3	1	5
8	29	62	9	13	5277	126	31	95	1	10	9	1	0	7	1	3	3	0	5

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WISCONSIN

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN LAKE MICHIGAN – WESTERN SHORE

STATION LOCATION LAKE MICHIGAN AT

MILWAUKEE, WISCONSIN 65

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	11.1	10.1	8.3	1.1	9	.7	1.4	.0	5	104	130	0	1	16	.0	153	190
10	9	61	5.5	11.1	8.0	3.5	11	.4	1.5	.0	6	106	131	0	1	16	.0	153	25
10	16	61	8.1	10.8	8.1	1.3	10	.6	1.4	.0	6	106	129	0	1	19	.0	151	19
10	23	61	9.0	11.0	8.2	2.4	8	.5	1.4	.0	7	104	131	0	4	18	.0	143	13
10	30	61	9.4	10.7	8.3	1.8	8	1.1	2.3	.1	7	107	131	0	2	16	.0	153	360
11	6	61	8.4	11.4	8.6	1.3	8	.5	.8	.0	7	105	131	0	1	19	.0	142	8
11	13	61	7.4	11.5	8.5	1.4	8	.7	1.8	.1	7	108	132	0	1	18	.0	157	530
11	20	61	6.7	11.5	8.4	.8	9	.7	1.2	.1	6	106	128	0	1	18	.0	148	6
11	27	61	6.6	12.1	8.2	1.5	7	.7	1.6	.0	6	105	130	0	6	19	.0	148	130
12	4	61	7.2	11.9	8.1	1.1	7	.7	1.0	.0	6	105	130	0	2	19	.0	143	8
12	11	61	4.8	12.2	8.2	.8	8	.6	1.4	.0	7	106	130	0	1	18	.0	154	*11
12	18	61	2.7	12.6	8.3	1.1	8	.5	1.0	.0	7	107	132	0	1	19	.0	146	13
1	2	62	1.4	13.3	8.2	.5	8	1.0	1.8	.0	9	107	132	0	0	19	.0	157	130
1	8	62	1.5	13.3	8.1	1.0	11	.3	1.1	.0	5	108	132	0	2	20	.0	145	7
1	15	62	.3	13.6	8.2	1.0	8	.7	1.3	.0	6	106	131	0	4	18	.0	150	5
1	22	62	.2	13.5	8.2	.8	9	.5	1.1	.0	5	107	130	0	0	20	.0	149	*1
1	29	62	.5	13.7	8.1	1.1	8	.6	1.5	.0	7	107	130	0	0	18	.0	154	3
2	5	62	.5	13.9	8.2	1.4	8	.5	1.2	.0	6	107	131	0	1	18	.0	145	*1
2	13	62	.4	14.0	8.3	2.3	9	1.0	2.6	.0	10	108	136	0	1	18	.0	155	-
2	19	62	.3	13.6	8.2	1.1	9	1.3	2.5	.1	9	110	133	0	3	22	.0	152	1100
2	26	62	.3	13.8	8.1	.9	8	.7	1.6	.0	8	109	132	0	2	19	.0	152	2200
3	5	62	.4	13.8	8.1	1.0	7	.4	1.3	.0	6	110	133	0	1	21	.0	154	3
3	12	62	.4	13.7	8.1	1.0	7	.6	1.2	.1	7	111	133	0	1	20	.0	144	44
3	19	62	.8	13.6	8.2	1.1	6	.7	1.3	.1	7	110	133	0	1	19	.0	152	*100
3	26	62	1.2	13.7	8.1	.9	8	.6	1.2	.1	7	110	133	0	2	19	.0	151	*1
4	2	62	1.7	13.2	8.0	1.1	6	.6	1.9	.0	7	110	131	0	1	18	.0	153	8
4	9	62	3.1	12.6	8.2	1.1	10	1.8	2.6	.0	9	112	140	5	2	20	.0	170	380
4	16	62	2.7	12.6	8.1	1.4	9	1.1	1.6	.1	7	106	128	0	5	19	.0	141	*1
4	23	62	4.9	12.5	8.1	2.0	9	1.5	2.5	.1	8	114	137	0	3	22	.0	162	92
4	30	62	4.9	13.4	8.1	1.4	9	.4	1.3	.0	7	107	130	0	1	19	.0	160	8
5	7	62	5.4	13.2	8.2	1.5	10	.6	1.4	.1	6	116	127	0	1	19	.0	147	50
5	14	62	5.4	12.5	8.3	1.4	10	.6	1.7	.0	7	108	129	0	1	17	.0	151	23
5	21	62	7.7	13.4	8.3	1.7	8	.5	2.1	.1	7	108	131	0	1	15	.0	169	18
5	28	62	7.6	13.2	8.4	2.3	9	.6	2.0	.1	7	108	130	0	1	19	.0	161	3
6	4	62	8.3	13.2	8.5	1.6	11	.9	2.1	.0	6	107	131	0	1	23	.0	164	10
6	11	62	8.2	12.7	8.3	.9	8	.8	1.7	.0	8	105	128	0	1	18	.0	153	15
6	18	62	8.7	12.0	8.3	1.5	10	.9	1.9	.0	7	107	129	0	1	18	.0	145	33
6	25	62	7.4	11.8	8.2	.8	7	.7	1.4	.0	8	106	130	0	0	18	.0	150	3
7	2	62	11.4	11.6	8.2	1.1	9	.6	1.5	.0	8	110	129	0	1	18	.0	157	3

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	WISCONSIN
MAJOR BASIN	WESTERN GREAT LAKES
MINOR BASIN	LAKE MICHIGAN-WESTERN SHORE
STATION LOCATION	LAKE MICHIGAN AT MILWAUKEE, WISCONSIN

65

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	9	62	11.6	10.3	8.3	1.0	10	.7	1.3	.1	8	108	128	0	1	19	.0	145	7
7	16	62	16.5	10.3	8.4	1.0	10	.6	1.8	.1	8	105	128	0	1	19	.0	157	*10
7	23	62	7.6	11.0	7.9	1.5	11	.8	1.5	.0	9	105	131	0	0	19	.0	146	100
7	30	62	12.3	10.6	8.3	1.1	11	.6	1.5	.0	7	104	130	0	1	18	.0	146	30
8	6	62	6.8	11.0	7.9	1.7	8	.8	1.3	.0	7	106	130	0	1	20	.0	153	10
8	13	62	18.4	9.5	8.3	1.8	11	.8	1.9	.0	7	106	126	0	1	20	.0	150	10
8	20	62	10.6	10.1	8.0	1.0	8	.3	1.6	.1	9	108	129	0	2	23	.0	160	1100
8	27	62	12.5	10.2	8.1	1.8	11	.9	1.7	.1	7	108	128	0	0	18	.0	156	100
9	10	62	6.4	11.0	7.9	1.9	6	.7	1.7	.1	9	107	131	0	1	19	.0	159	60
9	17	62	8.3	11.1	8.0	1.4	9	.7	.9	.0	7	107	131	0	1	20	.0	144	110
9	24	62	8.0	10.8	7.9	1.3	9	.8	2.0	.1	7	108	128	0	6	20	.0	160	1200

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineer
U.S. Lake Survey

STATE	Wisconsin
MAJOR BASIN	Western Great Lakes
MINOR BASIN	Lake Michigan-Western Shore
STATION LOCATION	Lake Michigan at Milwaukee, Wisconsin

October	November	December	January	February	March	April	May	June	July	August	September

FLOW DATA NOT APPLICABLE --- LAKE LEVELS ONLY

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN LAKE SUPERIOR
STATION LOCATION ST. MARYS RIVER AT
SAULT STE. MARIE, MICHIGAN 66

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	13	-	-	-	-	-	-	0	5	7	5	7	7						
10	9	61	10	31	-	-	-	-	-	-	0	5	4	5	4	7						
10	16	61	10	30	-	-	-	-	-	-	0	5	0	5	0	7						
10	23	61	11	2	0	1	0	1	0	1	2	4	2	4	4	6						
10	30	61	11	13	-	-	-	-	-	-	4	4	7	4	11	6						
11	6	61	11	22	-	-	-	-	-	-	4	4	3	4	7	6						
11	13	61	11	28	-	-	-	-	-	-	6	5	8	5	14	7						
11	20	61	11	30	0	1	0	1	0	1	2	6	8	6	10	8						
11	26	61	12	8	0	1	0	1	0	1	4	5	6	5	10	7						
12	4	61	12	12	-	-	-	-	-	-	4	5	12	5	16	7						
12	11	61	12	21	-	-	-	-	-	-	4	5	3	5	7	7						
12	18	61	1	2	-	-	-	-	-	-	3	6	1	5	4	8						
12	25	61	1	8	0	0	1	1	1	1	5	4	5	4	10	6						
1	8	62	1	24	-	-	-	-	-	-	3	5	7	5	10	7						
1	15	62	1	25	-	-	-	-	-	-	1	5	4	5	5	7						
1	22	62	2	8	-	-	-	-	-	-	8	6	6	6	14	8						
1	29	62	2	8	1	1	0	1	1	1	4	4	7	4	11	6						
2	5	62	2	15	-	-	-	-	-	-	7	4	7	4	14	6						
2	12	62	2	27	-	-	-	-	-	-	2	5	2	6	4	8						
2	19	62	3	5	-	-	-	-	-	-	5	4	6	4	11	6						
2	26	62	3	13	0	0	0	1	0	1	6	4	6	4	12	5						
3	5	62	3	19	-	-	-	-	-	-	0	5	6	5	6	7						
3	12	62	3	26	-	-	-	-	-	-	0	4	1	4	1	6						
3	19	62	4	3	-	-	-	-	-	-	3	6	5	5	8	7						
3	26	62	4	9	0	1	0	1	0	1	1	4	8	4	9	5						
4	2	62	4	16	-	-	-	-	-	-	5	4	5	4	10	6						
4	9	62	6	13	-	-	-	-	-	-	8	4	5	5	13	6						
4	16	62	4	30	-	-	-	-	-	-	0	7	1	6	1	9						
4	23	62	5	23	0	0	0	0	0	0	6	5	22	6	28	7						
4	30	62	6	4	-	-	-	-	-	-	2	7	6	7	8	10						
5	7	62	6	18	-	-	-	-	-	-	5	7	1	7	6	10						
5	14	62	6	21	-	-	-	-	-	-	7	7	7	8	14	11						
5	21	62	6	26	-	-	-	-	-	-	8	5	13	6	21	8						
5	28	62	7	2	0	1	0	0	0	1	1	5	3	5	4	7						
6	4	62	7	6	-	-	-	-	-	-	1	5	7	7	8	9						
6	11	62	7	12	-	-	-	-	-	-	1	5	9	6	10	8						
6	18	62	7	17	-	-	-	-	-	-	5	6	17	8	22	10						
6	25	62	9	7	0	0	0	0	0	0	1	5	1	5	2	7						
7	2	62	8	8	-	-	-	-	-	-	5	5	7	6	12	7						
7	9	62	8	7	-	-	-	-	-	-	2	5	9	6	11	7						
7	16	62	8	8	-	-	-	-	-	-	3	5	9	6	12	7						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN LAKE SUPERIOR
STATION LOCATION ST. MARYS RIVER AT
SAULT STE. MARIE, MICHIGAN 66

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
7	23	62	8	10	0	0	0	0	0	0	3	5	9	6	12	7						
7	30	62	8	21	-	-	-	-	-	-	1	5	10	5	11	7						
8	6	62	8	28	-	-	-	-	-	-	4	5	7	6	11	7						
8	13	62	8	24	-	-	-	-	-	-	11	6	6	6	17	8						
8	20	62	9	9	-	-	-	-	-	-	2	3	12	4	14	5						
8	27	62	9	12	-	-	-	-	-	-	0	8	10	7	10	11						
9	3	62	10	3	-	-	-	-	-	-	2	5	9	6	11	8						
9	10	62	10	8	-	-	-	-	-	-	4	6	7	6	11	8						
9	17	62	10	15	-	-	-	-	-	-	6	5	16	6	22	7						
9	24	62	10	22	0	0	0	0	0	0	1	3	6	3	7	4						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN LAKE SUPERIOR
STATION LOCATION ST. MARYS RIVER AT
SAULT STE. MARIE, MICHIGAN 66

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	100	0	0	20	0	20	0	0	60	20	190																				
10	16	61	200	0	0	0	0	0	0	20	150	0	210																				
11	6	61	200	20	0	40	0	0	0	40	100	40	60																				
11	20	61	200	0	0	0	0	0	0	20	230	0	80																				
12	4	61	500	70	0	90	0	20	20	110	180	70	90																				
12	18	61	100	0	0	0	0	0	0	0	80	0	60																				
1	2	62	400	0	0	110	0	50	0	50	230	0	90																				
1	15	62	300	0	20	80	0	0	0	60	100	60	60																				
2	12	62	100	0	0	0	0	0	0	60	80	0	60																				
2	19	62	200	0	0	0	0	0	0	90	110	0	20																				
3	5	62	00	0	0	0	0	20	0	0	0	0	0																				
3	19	62	100	0	0	0	0	0	20	0	70	0	70																				
4	2	62	100	0	0	40	0	0	0	20	40	0	0																				
4	16	62	100	0	0	20	0	0	0	70	50	0	20																				
5	8	62	300	0	20	40	0	20	0	60	170	0	0																				
5	21	62	100	0	0	60	0	0	0	0	80	0	110																				
6	4	62	100	0	0	20	0	0	0	0	40	20	130																				
6	18	62	500	0	0	20	0	100	0	120	290	40	40																				
7	2	62	400	0	0	110	0	0	0	80	210	170	300																				
7	16	62	600	0	0	40	0	0	0	230	340	110	520																				
8	6	62	1100	0	0	0	0	40	20	120	870	0	40	33	2																		
8	20	62	400	0	0	40	0	0	0	80	250	40	40																				
9	3	62	1400	0	0	40	0	0	0	370	990	40	0																				
9	17	62	900	0	0	0	0	0	0	40	830	40	210	92	1																		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MICHIGAN

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN LAKE SUPERIOR

STATION LOCATION ST. MARYS RIVER AT

SAULT STE. MARIE, MICHIGAN 066

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																		NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA								
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	95	20	47	18	2	9	24	7	46	20	0	18	17	1									0							0	0
10	16	61	47	61	95	10	8	5	6	2	22	0	0	10	17	1									1							0	0
11	6	61	47	63	95	9	9	7	24	6	15	0	0	4											1							0	0
11	20	61	47	23	95	21	24	5	2	4	47	0	0	0											0							0	0
12	4	61	95	21	47	17	2	7	81	5	50	90	0	4											0							0	0
12	18	61	47	28	95	15	2	9	25	4	44	0	10	2											0							0	0
1	2	62	95	27	47	12	60	8	89	8	45	0	0	1											1							0	1
1	15	62	95	22	60	10	47	9	89	8	51	0	0	3											0							0	0
2	12	62	95	14	60	8	9	8	89	6	64	0	0	3											2							0	0
2	19	62	26	15	95	15	60	10	92	9	51	0	0	2											0							0	0
3	5	62	60	30	95	14	77	12	9	10	34	20	0	0											0							0	0
3	19	62	95	13	9	12	60	11	77	10	54	0	0	1											0							0	0
4	2	62	95	24	60	16	47	13	9	11	36	0	0	0											0							0	0
4	16	62	60	38	95	20	9	7	92	6	29	0	0	0											0							0	0
5	8	62	60	21	95	21	92	14	89	11	33	0	0	0											0							0	0
5	21	62	60	45	95	17	92	9	47	5	24	0	0	0											0							0	0
6	4	62	60	22	95	19	91	7	25	4	48	0	0	5											0							0	0
6	18	62	95	12	91	10	9	7	25	7	64	0	0	11											4	50	1					0	0
7	2	62	95	28	24	11	9	8	92	5	48	0	0	225	17	5	11	4	3	4	5	2	21	1	36	50	3	51	2	76	2	0	1
7	16	62	95	18	30	13	25	10	24	8	51	0	0	12	11	1									2							1	0
8	6	62	95	25	24	15	25	7	33	6	47	0	0	10											8	51	1	52	1			2	0
8	20	62	95	21	25	18	2	12	24	8	41	0	0	54	11	3	17	2	10	1					9	51	2					0	0
9	3	62	95	37	24	16	25	5	47	4	38	0	0	7	11	1									16	51	3					0	0
9	17	62	24	22	95	17	92	12	25	11	38	0	0	28	11	1	17	1	10	1					3	77	1					0	1

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MICHIGAN

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN LAKE SUPERIOR

STATION LOCATION ST. MARYS RIVER AT
SAULT STE. MARIE, MICHIGAN 66

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	10	61	10	20	3440	135	16	119	-	-	-	-	-	-	-	-	-	-	-
11	7	61	11	21	4710	100	20	80	-	-	-	-	-	-	-	-	-	-	-
12	11	61	12	23	3855	88	13	75	-	-	-	-	-	-	-	-	-	-	-
12	11	61		*	12005	106	17	89	2	6	3	1	0	2	0	1	1	0	4
1	16	62	1	30	4579	92	16	76	-	-	-	-	-	-	-	-	-	-	-
3	5	62	3	19	4729	123	27	96	-	-	-	-	-	-	-	-	-	-	-
3	5	62		*	9308	107	21	86	1	8	4	1	0	3	0	2	2	0	4
4	10	62	4	23	2550	34	5	29	-	-	-	-	-	-	-	-	-	-	-
5	10	62	5	23	3686	103	26	77	-	-	-	-	-	-	-	-	-	-	-
6	13	62	6	26	3683	113	29	84	-	-	-	-	-	-	-	-	-	-	-
6	13	62		*	9919	90	22	68	1	8	5	2	0	3	0	2	2	0	4
7	14	62	7	27	4084	75	13	62	-	-	-	-	-	-	-	-	-	-	-
8	13	62	8	24	3923	104	23	81	-	-	-	-	-	-	-	-	-	-	-
9	7	62	9	19	3637	122	18	104	-	-	-	-	-	-	-	-	-	-	-
9	7	62		*	11644	99	18	81	2	6	3	1	0	2	0	1	1	0	5

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN LAKE SUPERIOR
STATION LOCATION ST. MARYS RIVER AT
SAULT STE. MARIE, MICHIGAN 66

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	12.8	9.5	7.8	-	6	.5	.9	.0	2	40	45	0	0	-	.5	-	55
10	9	61	13.6	10.0	7.8	-	6	.5	1.0	.0	2	43	45	0	0	-	.1	-	10
10	16	61	10.9	10.9	7.8	-	7	.4	.8	.0	2	42	45	0	0	0	.1	-	8
10	23	61	10.5	10.7	7.8	-	6	.4	.8	.0	2	42	45	0	0	-	.1	-	8
10	30	61	10.0	10.6	7.8	-	8	.3	.8	.0	2	42	45	0	0	-	.1	-	6
11	6	61	8.6	11.0	7.8	-	7	.3	.8	.0	2	42	45	0	0	3	.0	-	5
11	13	61	7.5	12.5	7.8	-	7	.3	.8	.1	2	45	45	0	0	5	.0	32	9
11	20	61	6.4	12.3	7.8	-	7	.3	.9	.1	2	41	44	0	0	-	.0	-	8
11	27	61	5.7	12.5	7.8	-	6	.3	.8	.1	2	42	45	0	0	3	.0	47	7
12	4	61	5.9	12.5	7.8	-	6	.3	.7	.1	2	41	46	0	0	-	.0	72	3
12	11	61	2.8	12.8	7.7	-	6	.2	.6	.1	2	42	44	5	0	3	.0	62	10
12	18	61	2.3	12.5	7.8	-	5	.2	.7	.1	2	41	45	0	0	4	.0	62	2
12	25	61	1.5	13.1	7.7	-	6	.2	.6	.1	2	42	45	0	0	-	.0	-	10
1	2	62	.2	13.3	7.6	-	6	.2	.4	.1	2	41	45	0	0	-	.0	-	2
1	8	62	.4	13.5	7.7	-	5	.2	.5	.1	2	42	45	0	0	-	.0	-	*1
1	15	62	.1	13.8	7.7	-	6	.2	.5	.1	2	42	45	0	0	7	.0	74	1
1	22	62	.1	13.5	7.6	-	6	.2	.5	.1	2	43	45	0	0	5	.0	49	*1
1	29	62	.0	13.6	7.7	-	6	.2	.5	.1	2	42	45	0	0	7	.0	51	1
2	5	62	.0	13.6	7.7	-	6	.2	.5	.1	2	42	45	0	0	8	.0	35	1
2	12	62	.0	14.0	7.7	-	5	.2	.5	.1	2	42	45	0	0	15	.0	-	*1
2	19	62	.0	13.8	7.7	-	6	.2	.6	.1	2	42	46	0	0	7	.0	14	3
2	26	62	.1	13.3	7.6	-	5	.2	.7	.1	2	42	46	0	0	-	.0	-	1
3	5	62	.2	12.7	7.7	-	5	.2	.6	.1	2	42	46	0	0	-	.0	-	*1
3	12	62	.3	12.8	7.7	-	6	.3	.7	.1	2	43	47	0	0	-	.0	-	2
3	19	62	.3	12.8	7.6	-	5	.3	.8	.1	2	43	46	0	0	-	.0	-	2
3	26	62	.3	12.8	7.7	-	6	.3	.8	.1	1	42	46	0	0	-	.0	-	1
4	2	62	.4	11.9	7.7	-	5	.4	.9	.1	1	42	46	0	0	-	.0	-	-
4	9	62	.5	11.8	7.7	-	6	.6	2.0	.1	1	42	45	0	0	-	.0	-	-
4	16	62	.4	11.8	7.8	-	5	.4	.9	.1	1	41	45	0	0	7	.0	62	*1
4	23	62	.5	11.7	7.8	-	5	.6	1.6	.1	1	41	45	0	-	5	.0	60	1
4	30	62	2.0	11.6	7.8	-	6	.6	1.4	.1	1	43	45	0	-	6	.0	62	7
5	7	62	1.5	11.6	7.8	-	6	.3	.7	.1	1	43	45	0	-	8	.0	67	13
5	14	62	2.8	13.3	7.7	-	7	.4	1.0	.1	1	41	45	1	-	-	.0	-	32
5	21	62	5.7	12.4	7.8	-	7	.5	1.2	.1	1	41	45	3	-	3	.0	-	*3
5	28	62	6.1	12.0	7.8	-	6	.5	1.1	.1	1	40	45	5	-	-	.0	-	7
6	4	62	8.1	11.0	8.0	-	5	.4	.9	.1	2	41	45	3	-	7	.0	-	4
6	11	62	7.4	11.3	7.9	-	6	.3	.8	.1	1	41	44	3	-	3	.0	-	13
6	13	62	10.5	11.0	7.9	-	7	.4	1.1	.1	2	41	45	3	-	-	.0	-	-
6	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MICHIGAN

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN LAKE SUPERIOR

STATION LOCATION ST. MARYS RIVER AT

SAULT STE. MARIE, MICHIGAN 66

DATE OF SAMPLE			TEMP. (Degrees Centigrad.)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	25	62	10.7	11.0	8.0	-	6	.3	1.0	.1	2	42	45	3	-	-	.0	-	1
7	2	62	14.6	10.0	8.0	-	6	.4	1.2	.1	2	42	45	0	-	7	.0	62	13
7	9	62	13.9	9.5	8.1	-	6	.4	1.2	.1	2	40	45	0	-	-	.0	-	18
7	16	62	15.5	9.0	8.1	-	6	.3	.8	.1	2	40	45	0	-	-	.0	-	33
7	23	62	15.9	9.8	8.0	-	5	.3	1.1	.1	2	42	45	0	-	7	.0	40	18
7	30	62	16.3	9.8	8.0	-	5	.3	1.0	.1	2	41	46	0	-	4	.0	48	-
8	6	62	17.3	9.6	7.9	-	6	.3	1.1	.1	2	42	45	0	-	-	.0	-	120
8	13	62	15.9	9.7	8.0	-	6	.3	1.0	.1	2	42	45	0	-	5	.0	43	92
8	20	62	16.1	9.8	8.0	-	5	.3	.9	.1	2	42	45	0	-	4	.0	44	*1
8	27	62	16.8	9.8	7.8	-	5	.3	1.0	.1	2	42	45	0	-	-	.0	-	950
9	3	62	16.9	9.7	7.9	-	5	.3	1.1	.1	2	42	45	0	-	1	.0	59	38
9	10	62	15.5	9.9	8.0	-	5	.4	1.1	.1	2	42	45	0	-	-	.0	-	20
9	17	62	13.9	10.1	8.0	-	5	.5	1.2	.1	2	42	45	0	-	7	.0	-	38
9	24	62	13.2	10.5	8.0	-	5	.5	1.1	.1	2	42	45	0	-	3	.0	70	11

MEAN MONTHLY FLOW - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineers
U.S. Lake Survey

STATE	Michigan
MAJOR BASIN	Western Great Lakes
MINOR BASIN	Lake Superior
STATION LOCATION	St. Marys River at Sault Ste. Marie, Michigan

October	November	December	January	February	March	April	May	June	July	August	September
58.000	65.000	65.000	64.000	65.000	67.000	67.000	60.000	60.000	60.000	61.000	70.000

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MINNESOTA
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN LAKE SUPERIOR
STATION LOCATION LAKE SUPERIOR AT
DULUTH, MINNESOTA

16

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	16	-	-	-	-	-	-	0	5	1	6	1	8						
10	10	61	10	31	-	-	-	-	-	-	3	4	5	4	8	6						
10	16	61	10	31	-	-	-	-	-	-	13	5	2	6	15	8						
10	23	61	11	2	-	-	-	-	-	-	0	5	2	5	2	7						
10	30	61	11	9	-	-	-	-	-	-	1	5	5	5	6	7						
11	6	61	11	21	-	-	-	-	-	-	0	5	5	5	5	7						
11	13	61	11	24	0	0	0	1	0	1	2	5	6	5	8	7						
11	20	61	11	30	-	-	-	-	-	-	1	5	3	6	4	8						
11	27	61	12	12	-	-	-	-	-	-	2	5	2	5	4	7						
12	4	61	12	15	-	-	-	-	-	-	1	5	2	5	3	7						
12	11	61	12	20	0	1	0	1	0	1	6	4	4	4	10	6						
12	18	61	1	3	-	-	-	-	-	-	3	6	3	5	6	8						
1	2	62	1	11	-	-	-	-	-	-	11	6	1	5	12	8						
1	8	62	1	17	0	0	0	1	0	1	10	4	10	4	20	6						
1	15	62	1	24	-	-	-	-	-	-	0	4	4	4	4	6						
1	22	62	1	30	-	-	-	-	-	-	2	4	2	4	4	6						
1	29	62	2	6	-	-	-	-	-	-	6	6	19	7	25	9						
2	5	62	2	14	-	-	-	-	-	-	0	6	0	5	0	8						
2	13	62	2	23	0	0	0	0	0	0	0	3	7	4	7	5						
2	19	62	3	2	-	-	-	-	-	-	0	5	2	5	2	7						
2	26	62	3	12	-	-	-	-	-	-	2	4	4	4	6	5						
3	5	62	3	15	-	-	-	-	-	-	8	5	3	5	11	7						
3	12	62	3	22	0	0	0	1	0	1	0	4	0	4	0	5						
3	19	62	3	30	-	-	-	-	-	-	29	4	0	5	29	6						
3	26	62	4	12	-	-	-	-	-	-	2	4	4	4	6	6						
4	2	62	4	16	-	-	-	-	-	-	2	5	5	5	7	7						
4	9	62	4	20	0	0	0	0	0	0	2	4	3	4	5	5						
4	16	62	4	27	-	-	-	-	-	-	3	5	3	6	6	7						
4	23	62	5	22	-	-	-	-	-	-	9	6	11	7	20	9						
5	7	62	6	11	-	-	-	-	-	-	1	6	4	7	5	9						
5	14	62	6	22	0	1	0	0	0	1	1	5	9	6	10	8						
5	21	62	6	26	-	-	-	-	-	-	4	5	4	6	8	8						
5	28	62	6	30	-	-	-	-	-	-	17	4	6	3	23	5						
6	4	62	6	4	-	-	-	-	-	-	0	7	9	6	9	9						
6	11	62	8	1	0	0	0	1	0	1	2	5	5	6	7	7						
6	18	62	7	16	-	-	-	-	-	-	2	5	7	6	9	7						
6	25	62	7	24	-	-	-	-	-	-	15	8	2	5	17	9						
7	2	62	7	31	-	-	-	-	-	-	0	6	4	7	4	9						
7	9	62	8	8	0	0	1	2	1	2	0	5	3	6	3	7						
7	16	62	10	1	-	-	-	-	-	-	1	5	3	5	4	7						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	MINNESOTA
MAJOR BASIN	WESTERN GREAT LAKES
MINOR BASIN	LAKE SUPERIOR
STATION LOCATION	LAKE SUPERIOR AT DULUTH, MINNESOTA 16

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	23	62	8	9	-	-	-	-	-	-	4	5	10	5	14	7						
7	30	62	9	19	-	-	-	-	-	-	3	6	4	6	7	8						
8	6	62	8	27	-	-	-	-	-	-	3	6	7	5	10	7						
8	13	62	8	29	0	0	0	1	0	1	7	5	5	6	12	7						
8	20	62	9	5	-	-	-	-	-	-	4	5	3	6	7	7						
8	27	62	9	17	-	-	-	-	-	-	10	7	10	8	20	11						
9	4	62	10	1	-	-	-	-	-	-	5	5	4	5	9	7						
9	17	62	10	10	-	-	-	-	-	-	2	5	6	5	8	7						
9	24	62	10	16	-	-	-	-	-	-	1	6	3	5	4	7						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MINNESOTA

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN LAKE SUPERIOR

STATION LOCATION LAKE SUPERIOR AT

DULUTH, MINNESOTA 16

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	100	0	0	0	0	0	0	80	0	20	0																				
10	16	61	00	0	0	20	0	0	0	0	0	20	20																				
11	6	61	00	0	0	0	0	0	0	20	0	0	20																				
11	20	61	00	0	0	0	0	0	0	20	20	0	20																				
12	4	61	00	0	0	0	0	0	0	200	200	700	20																				
12	18	61	00	0	0	0	0	0	0	20	0	0	20																				
1	2	62	300	50	0	20	0	70	0	140	20	20	0																				
1	15	62	100	0	0	40	0	0	0	40	60	20	40																				
2	5	62	100	20	0	20	0	0	0	20	70	0	50																				
2	19	62	100	0	0	0	0	20	0	0	90	0	20																				
3	5	62	100	0	0	0	0	0	0	90	60	20	0																				
3	19	62	200	0	0	60	0	0	20	120	20	20	20																				
4	2	62	500	500	0	0	0	0	0	40	0	20	0	3	2																		
4	16	62	200	0	0	120	0	0	0	40	60	0	20																				
5	7	62	300	170	0	40	0	20	0	20	40	0	0																				
5	21	62	100	0	0	40	0	0	0	0	20	20	0																				
6	4	62	200	0	20	80	0	0	0	40	20	0	20																				
6	18	62	400	0	0	150	0	0	0	170	40	20	110																				
7	2	62	52600	52120	0	40	0	0	40	170	250	170	40	4	9																		
7	16	62	200	0	0	20	0	0	0	90	90	0	0																				
8	6	62	200	0	0	20	0	0	0	120	60	0	0																				
8	20	62	300	0	0	0	0	0	0	130	210	80	0																				
9	4	62	200	0	0	0	0	0	0	0	170	40	0																				
9	17	62	00	0	0	0	0	0	0	0	0	10	0																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MINNESOTA

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN LAKE SUPERIOR

STATION LOCATION LAKE SUPERIOR AT

DULUTH, MINNESOTA 016

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	58	77	95	6	56	4	25	2	11	0	0	5	11	1									4							0	0
10	16	61	58	34	95	32	56	9	47	5	20	0	0	2											3	76	1					0	0
11	6	61	25	19	95	18	24	14	77	12	37	0	0	0											0							0	0
11	20	61	25	17	9	11	94	8	47	7	57	0	0	3											5	76	1					0	0
12	4	61	60	16	25	13	91	13	81	12	46	0	0	2											1							0	0
12	18	61										0	0	0											1							0	0
1	2	62	25	18	9	16	91	13	81	11	42	0	0	0											0							0	0
1	15	62	25	18	84	13	95	11	89	7	51	0	0	0											1							0	0
2	5	62	84	9	25	8	84	8	14	6	69	20	0	0											0							0	0
2	19	62	60	21	89	16	9	13	81	12	38	0	10	0											0							0	0
3	5	62	89	19	60	15	24	14	9	13	39	0	0	2											2							0	0
3	19	62	76	32	81	8	60	7	67	6	47	0	0	0											0							0	0
4	2	62										0	0	0											0							0	0
4	16	62	89	22	77	8	82	7	60	7	56	0	0	0											0							0	0
5	7	62	77	27	91	18	92	10	45	5	40	0	0	0											2							0	0
5	21	62	47	19	77	11	92	9	9	9	52	0	0	0											2							0	0
6	4	62	25	19	91	18	60	10	84	6	47	0	0	0											1							0	0
6	18	62	91	29	30	17	9	13	60	8	33	0	0	1											1							0	0
7	2	62	60	40	28	26	46	7	92	7	20	0	10	7											11	50	1	77	1			1	0
7	16	62	60	32	30	20	56	13	91	9	26	0	0	4											3							0	0
8	6	62	95	60	56	8	47	6	28	4	22	0	10	14	10	1									24	51	2	52	2	73	1	0	0
8	20	62	95	49	9	20	91	4	24	4	23	0	0	41	10	2	21	2	17	1					21	50	2	77	2	51	1	0	0
9	4	62	95	82	9	4	47	3	30	1	10	0	0	285	11	6	17	3	10	3					27	76	3	50	2	51	1	0	0
9	17	62	95	61	9	8	82	8	24	7	16	0	0	3											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MINNESOTA
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN LAKE SUPERIOR
STATION LOCATION LAKE SUPERIOR AT
DULUTH, MINNESOTA

16

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	10	61	10	23	6818	96	23	73	-	-	-	-	-	-	-	-	-	-	-
11	14	61	11	28	6877	81	19	62	-	-	-	-	-	-	-	-	-	-	-
12	4	61	12	18	7102	65	12	53	-	-	-	-	-	-	-	-	-	-	-
12	4	61		*	20797	85	18	67	4	5	3	1	0	2	0	1	1	0	4
1	2	62	1	15	5565	86	16	70	-	-	-	-	-	-	-	-	-	-	-
2	5	62	2	19	6667	96	12	84	-	-	-	-	-	-	-	-	-	-	-
3	5	62	3	19	6742	74	16	58	-	-	-	-	-	-	-	-	-	-	-
3	5	62		*	18974	85	15	70	1	5	4	1	0	3	0	1	1	0	3
4	2	62	4	16	6105	101	25	76	-	-	-	-	-	-	-	-	-	-	-
5	7	62	5	21	5827	68	24	44	-	-	-	-	-	-	-	-	-	-	-
6	4	62	6	18	6232	79	22	57	-	-	-	-	-	-	-	-	-	-	-
6	4	62		*	18164	83	23	60	2	9	5	1	1	3	0	2	2	0	3
7	2	62	7	16	6135	88	33	55	-	-	-	-	-	-	-	-	-	-	-
8	6	62	8	20	5130	90	31	59	-	-	-	-	-	-	-	-	-	-	-
9	4	62	9	17	6202	93	18	75	-	-	-	-	-	-	-	-	-	-	-
9	4	62		*	17467	90	27	63	3	9	4	1	0	3	0	2	2	0	7

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MINNESOTA
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN LAKE SUPERIOR
STATION LOCATION LAKE SUPERIOR AT
DULUTH, MINNESOTA 16

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	12.2	10.5	7.6	.3	8	.8	1.9	.0	2	42	44	0	2	3	.0	47	40
10	10	61	12.2	10.6	7.7	.4	9	.8	2.0	.0	2	43	44	0	1	3	.0	60	3
10	16	61	10.0	11.1	7.6	.4	9	.7	1.7	.0	2	42	44	0	0	3	.0	56	4
10	23	61	8.9	11.2	7.8	.3	9	.7	1.6	.0	2	42	44	5	0	3	.0	49	*1
10	30	61	8.8	11.4	7.8	.5	9	.8	1.6	.0	2	43	44	0	0	3	.0	50	*1
11	6	61	5.6	12.5	7.5	.4	7	.7	1.7	.0	2	42	44	0	1	3	.0	50	17
11	13	61	6.1	12.1	7.6	.4	6	.8	1.7	.0	2	42	43	0	0	3	.0	60	-
11	20	61	5.6	12.2	7.7	.5	9	.7	1.7	.0	3	42	44	5	1	3	.0	58	200
11	27	61	5.6	12.4	7.5	.4	8	.6	1.4	.0	2	42	44	0	1	3	.0	68	1
12	4	61	5.0	12.3	7.8	.5	8	.8	1.7	.0	2	42	44	0	0	3	.0	54	*1
12	11	61	4.4	12.6	7.6	.2	7	.6	1.7	.0	2	42	44	0	0	3	.0	56	*1
12	18	61	4.4	12.5	7.5	.4	8	.6	1.6	.0	2	42	44	0	0	3	.0	52	*1
1	2	62	3.3	12.9	7.5	.3	7	.6	1.4	.0	2	42	44	5	0	3	.0	50	2
1	8	62	2.8	13.1	7.5	.3	6	.5	1.2	.0	2	42	44	0	1	2	.0	52	*1
1	15	62	2.2	13.2	7.5	.5	6	.6	1.4	.0	2	42	44	0	0	3	.0	57	*1
1	22	62	2.2	13.1	7.6	.6	7	.8	1.5	.0	2	42	43	5	0	3	.0	55	*1
1	29	62	1.7	13.3	7.5	.5	10	.6	1.5	.0	2	42	44	0	0	3	.0	47	3
2	5	62	.6	13.6	7.5	.3	9	.6	1.5	.0	2	42	44	5	0	3	.0	46	1
2	13	62	1.7	13.4	7.5	.5	7	.7	1.6	.0	2	43	45	5	0	3	.0	56	1
2	19	62	1.1	13.8	7.5	.5	10	.8	1.4	.0	2	43	45	5	1	3	.0	49	*1
2	26	62	1.7	13.8	7.5	.3	8	.6	1.3	.0	2	43	45	5	0	3	.0	51	*1
3	5	62	1.7	13.7	7.5	.3	9	.6	1.5	.0	2	43	45	5	0	3	.0	60	*1
3	12	62	1.1	13.6	7.6	.5	10	.6	1.5	.0	2	43	45	5	0	3	.0	54	*1
3	19	62	1.1	13.8	7.6	.9	7	.7	1.7	.0	2	43	45	5	0	3	.0	49	-
3	26	62	1.1	13.7	7.5	.4	8	.6	1.4	.0	2	44	45	5	0	3	.0	53	*1
4	2	62	1.1	13.6	7.6	.4	11	.6	1.3	.0	2	42	43	0	0	3	.0	57	33
4	9	62	1.7	13.6	7.5	.6	10	.5	1.5	.0	2	43	44	5	0	3	.0	56	16
4	16	62	2.2	13.8	7.5	.6	8	.7	1.5	.0	2	42	43	5	0	3	.0	53	-
4	23	62	2.2	13.7	7.7	.6	8	.5	1.3	.0	2	43	43	5	0	3	.0	55	1
5	7	62	2.8	13.6	7.7	.9	9	.7	1.6	.0	2	42	43	5	0	3	.0	60	*1
5	14	62	3.3	13.6	7.6	.4	12	.7	1.5	.0	2	42	43	5	1	3	.0	56	14
5	21	62	3.3	13.5	7.6	.3	9	.7	1.4	.0	2	42	43	0	1	3	.0	60	11
5	28	62	3.9	13.5	7.5	.5	12	.7	1.5	.0	2	42	43	5	1	3	.0	58	5
6	4	62	4.4	13.5	7.4	.6	9	.8	1.4	.0	2	42	43	5	0	3	.0	58	*1
6	14	62	4.4	13.3	7.6	.4	10	.6	1.3	.0	2	42	43	5	0	3	.0	57	-
6	18	62	3.3	13.2	7.4	.3	8	.5	1.2	.0	2	42	44	0	0	4	.0	59	1
6	25	62	5.6	13.0	7.6	.3	8	.7	1.6	.0	2	43	44	5	1	4	.0	58	*1
7	2	62	4.4	11.6	7.6	.5	11	1.1	1.9	.1	2	43	44	5	2	4	.0	64	20
7	9	62	5.0	11.5	7.6	.4	10	.9	1.7	.0	2	42	43	5	0	3	.0	56	1

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MINNESOTA
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN LAKE SUPERIOR
STATION LOCATION LAKE SUPERIOR AT
DULUTH, MINNESOTA 16

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	16	62	11.0	12.5	7.6	.5	11	.9	1.8	.0	2	42	44	0	2	3	.0	61	13
7	23	62	12.8	11.6	7.5	.8	11	.8	1.8	.0	2	43	45	5	2	4	.0	61	-
7	30	62	5.0	12.7	7.5	1.2	9	.6	1.2	.0	2	43	44	0	0	3	.0	59	*1
8	6	62	13.9	11.7	7.7	1.0	9	.8	1.9	.0	2	42	43	0	0	3	.0	60	2
8	13	62	14.4	10.6	7.7	.7	10	.7	1.5	.0	2	43	44	0	0	3	.0	54	2
8	20	62	13.3	10.7	7.6	.5	10	.7	1.6	.0	2	42	43	5	2	3	.0	60	3
8	27	62	13.9	10.5	7.7	.4	10	.7	1.5	.0	2	42	43	5	1	3	.0	53	11
9	4	62	16.7	10.0	7.5	.5	12	.6	1.6	.0	2	43	44	5	0	3	.0	52	*3
9	11	62	14.4	10.4	7.6	.5	8	.5	1.5	.0	2	43	44	5	0	3	.0	58	3
9	17	62	8.9	11.7	7.5	.4	7	.5	1.4	.0	2	42	43	0	0	3	.0	65	4
9	24	62	8.3	11.9	7.5	.4	11	.5	1.2	.0	2	42	43	5	0	3	.0	60	30

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineers
U.S. Lake Survey

STATE	Minnesota
MAJOR BASIN	Western Great Lakes
MINOR BASIN	Lake Superior
STATION LOCATION	Lake Superior at Duluth, Minnesota

October	November	December	January	February	March	April	May	June	July	August	September

FLOW DATA NOT APPLICABLE --- LAKE LEVELS ONLY

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE UTAH
MAJOR BASIN COLORADO RIVER
MINOR BASIN GREEN RIVER
STATION LOCATION GREEN RIVER AT
DUTCH JOHN, UTAH

121

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
6	25	62	2600	0	0	190	0	0	0	550	1860	170	2030	92	2	97	1	82	1	79	1	87	1										
7	16	62	2300	0	0	0	0	0	0	40	2280	0	630	92	5	82	4	97	1	88	1	87	1										
8	6	62	700	0	0	0	40	0	40	0	620	0	0	97	1																		
8	20	62	800	0	0	40	0	0	0	40	680	0	590	79	1	97	1																
9	4	62	1000	0	0	0	0	0	0	130	890	80	630	79	2																		
9	17	62	1400	0	0	30	0	0	0	0	1400	20	260	88	2	87	1																

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE UTAH
MAJOR BASIN COLORADO RIVER
MINOR BASIN GREEN RIVER
STATION LOCATION GREEN RIVER AT
DUTCH JOHN, UTAH

121

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
6	25	62	92	20	36	11	41	11	15	7	51	0	0	0											0							0	0
7	16	62	92	60	36	25	41	3	47	1	11	80	0	0											0							0	0
8	6	62	41	34	36	24	16	9	92	9	24	0	0	0											0							0	0
8	20	62	15	30	41	12	16	8	36	5	45	0	0	0											0							0	0
9	4	62	16	48	64	5	78	4	41	4	39	0	0	0											0							0	0
9	17	62	67	22	70	16	92	6	15	5	51	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE UTAH
MAJOR BASIN COLORADO RIVER
MINOR BASIN GREEN RIVER
STATION LOCATION GREEN RIVER AT
DUTCH JOHN, UTAH 121

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
7	23	62	8	20	0	1	1	2	1	2	8	5	41	6	49	7						
7	30	62	8	17	1	1	2	2	3	2	19	12	30	14	49	18						
8	6	62	8	28	0	1	1	2	1	2	7	11	36	14	43	18						
8	13	62	8	30	0	2	1	2	1	3	14	13	26	13	40	18						
8	20	62	9	5	0	3	1	2	1	4	11	7	18	7	29	10						
8	27	62	9	13	3	2	3	3	6	4	6	13	13	14	19	19						
9	4	62	9	17	1	1	2	2	3	2	14	15	13	16	27	22						
9	10	62	9	26	1	1	5	3	6	3	4	10	18	14	22	17						
9	17	62	10	14	2	1	2	2	4	2	3	12	8	15	11	19						
9	24	62	10	18	6	3	3	3	9	4	40	16	34	15	74	22						

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE UTAH
MAJOR BASIN COLORADO RIVER
MINOR BASIN GREEN RIVER
STATION LOCATION GREEN RIVER AT
DUTCH JOHN, UTAH 121

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	23	62	-	-	-	-	-	-	-	-	12	148	184	10	53	95	.0	293	-
7	30	62	-	-	-	-	-	-	-	-	10	132	176	5	25	105	.0	318	-
8	6	62	-	-	7.8	-	-	-	-	-	11	140	196	-	0	115	.0	326	-
8	13	62	-	-	-	-	-	-	-	-	7	138	196	0	-	120	.0	330	-
8	27	62	-	-	-	-	-	-	-	-	11	128	216	0	-	150	.0	370	-
9	4	62	-	-	-	-	-	-	-	-	15	128	212	5	25	155	.0	390	-
9	10	62	-	-	-	-	-	-	-	-	16	152	228	5	25	175	.0	437	-
9	17	62	-	-	-	-	-	-	-	-	17	120	212	5	*25	195	.0	435	-
9	24	62	-	-	7.9	-	-	-	-	-	12	122	250	0	230	120	.0	494	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Greendale, Utah
Operated by U.S. Geological Survey

STATE	Utah
MAJOR BASIN	Colorado River
MINOR BASIN	Green River
STATION LOCATION	Green River at Dutch John, Utah

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.969	1.050	.946	.900	.700	.844	7.790	7.540	4.920	9.860	3.000	.952
2	.940	1.090	.963	.900	.700	.833	7.460	6.490	4.500	9.760	3.030	.934
3	.912	.912	.918	.900	.700	.874	7.930	5.710	4.340	9.160	2.840	.923
4	.891	.992	.802	.900	.700	.934	6.940	5.340	4.520	8.140	2.690	.912
5	.864	.957	.749	.900	.800	.885	6.500	5.320	5.100	7.290	2.470	.880
6	.854	.952	.700	.900	.800	.918	6.190	5.480	6.190	6.740	2.320	.849
7	.854	.838	.640	.900	.800	.918	5.890	6.240	7.330	6.270	2.230	.818
8	.952	.744	.530	.900	1.000	.940	5.800	7.040	7.350	5.670	2.140	.780
9	1.050	.714	.450	.600	1.000	.849	5.680	7.750	6.840	5.100	2.080	.744
10	1.010	.775	.350	.600	1.000	.885	5.490	8.560	6.430	4.710	2.030	.722
11	1.090	.980	.350	.600	1.000	.808	5.070	8.880	5.850	4.580	1.930	.681
12	1.370	1.110	.370	.600	1.300	.784	4.740	9.110	5.370	4.500	1.820	.678
13	1.760	1.080	.400	.600	2.000	.794	4.540	9.190	5.320	4.350	1.760	.674
14	1.620	1.060	.440	.600	4.500	.791	4.480	9.030	6.010	4.260	1.740	.678
15	1.320	1.050	.480	.600	5.610	.780	4.670	8.650	7.180	4.330	1.720	.674
16	1.220	1.010	.520	.600	3.960	.794	5.190	8.120	8.280	4.900	1.650	.659
17	1.150	.697	.570	.600	2.970	.828	5.930	7.350	9.080	5.260	1.560	.659
18	1.090	.553	.630	.600	2.240	.864	6.320	6.670	9.540	4.920	1.510	.638
19	1.050	.560	.690	.600	1.670	.901	5.980	5.930	9.170	4.420	1.460	.638
20	.998	.580	.770	.600	1.430	.969	5.710	5.440	8.410	3.870	1.420	.635
21	.986	.600	.860	.600	1.150	1.030	5.620	4.950	8.050	3.450	1.400	.652
22	.952	.700	.940	.600	1.210	1.040	5.790	4.540	8.470	3.160	1.380	.784
23	.912	.860	.940	.600	1.090	1.450	6.430	4.460	9.430	2.960	1.380	.674
24	.901	1.000	.940	.600	.934	1.400	7.180	4.960	10.400	3.000	1.350	.670
25	.907	1.150	.940	.600	.722	1.440	7.080	4.860	10.800	2.900	1.310	.706
26	.912	1.200	.940	.700	.659	2.020	7.250	4.800	10.700	2.750	1.250	.701
27	.934	1.030	.900	.700	.714	3.630	7.430	4.860	10.300	2.670	1.230	.701
28	.969	.986	.900	.700	.736	11.400	7.810	5.100	10.100	2.620	1.190	.722
29	.986	1.050	.900	.700		11.600	8.040	5.300	9.940	2.620	1.130	.718
30	.880	.924	.900	.700		10.300	7.710	5.740	9.920	2.730	1.050	.706
31	.896		.900	.700		12.900		5.490		2.980	1.010	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN LOWER HUDSON RIVER
STATION LOCATION HUDSON RIVER BELOW
POUGHKEEPSIE, NEW YORK 18

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	4	61	10	20	0	0	0	1	0	1	3	4	4	5	7	6						
10	11	61	10	24	-	-	-	-	-	-	0	6	8	6	8	8						
11	1	61	11	16	-	-	-	-	-	-	0	5	7	6	7	8						
11	8	61	11	21	0	1	0	1	0	1	9	4	13	5	22	6						
11	15	61	11	30	-	-	-	-	-	-	2	6	8	6	10	8						
12	13	61	12	26	-	-	-	-	-	-	10	7	14	6	24	9						
12	20	61	1	8	1	1	0	1	1	1	13	5	21	5	34	7						
1	3	62	1	12	0	1	0	1	0	1	13	4	25	5	38	6						
1	24	62	2	2	-	-	-	-	-	-	19	6	36	7	55	9						
1	31	62	2	13	-	-	-	-	-	-	18	4	33	5	51	6						
2	7	62	2	19	0	0	0	1	0	1	14	4	37	6	51	7						
2	14	62	3	2	-	-	-	-	-	-	14	4	38	6	52	7						
2	28	62	3	14	-	-	-	-	-	-	28	6	55	7	83	9						
3	7	62	3	20	0	0	0	1	0	1	5	4	25	5	30	6						
3	12	62	3	23	-	-	-	-	-	-	11	5	37	7	48	9						
3	28	62	4	9	-	-	-	-	-	-	32	5	41	6	73	7						
4	4	62	4	18	1	1	0	1	1	1	25	5	25	5	50	7						
4	11	62	4	26	-	-	-	-	-	-	5	6	25	6	30	9						
4	18	62	5	23	-	-	-	-	-	-	0	8	7	7	7	11						
4	25	62	6	19	-	-	-	-	-	-	4	6	15	7	19	9						
5	9	62	6	15	0	0	1	1	1	1	0	5	13	6	13	7						
5	23	62	6	30	-	-	-	-	-	-	2	3	10	3	12	4						
6	6	62	10	2	0	1	0	1	0	1	4	6	7	7	11	9						
6	13	62	7	13	-	-	-	-	-	-	7	7	12	4	19	8						
6	20	62	8	14	-	-	-	-	-	-	6	5	11	6	17	7						
6	27	62	7	24	-	-	-	-	-	-	9	5	15	6	24	7						
7	11	62	8	8	-	-	-	-	-	-	6	6	7	8	13	10						
8	1	62	8	23	-	-	-	-	-	-	4	5	10	6	14	7						
8	8	62	8	28	0	1	0	1	0	1	1	5	11	6	12	7						
8	15	62	8	30	-	-	-	-	-	-	3	5	8	6	11	7						
8	29	62	9	18	-	-	-	-	-	-	5	7	11	10	16	12						
9	5	62	9	19	1	1	0	1	1	1	7	5	20	7	27	9						
9	12	62	10	5	-	-	-	-	-	-	4	7	52	9	56	11						
9	19	62	10	15	-	-	-	-	-	-	3	5	11	7	14	9						
9	26	62	12	14	-	-	-	-	-	-	5	6	10	7	15	9						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN LOWER HUDSON RIVER
STATION LOCATION HUDSON RIVER BELOW
POUGHKEEPSIE, NEW YORK 18

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	300	20	0	70	0	70	0	50	70	360	360																				
11	1	61	900	0	0	0	0	170	0	520	210	100	20	68	1	69	1																
11	15	61	600	0	0	20	0	20	0	390	170	20	60	68	1	67	1																
12	13	61	700	0	0	20	0	20	0	390	310	100	410	69	1																		
12	20	61	600	0	20	20	0	60	0	370	170	120	190	68	1	69	1																
1	3	62	1300	20	0	90	0	110	0	540	540	50	160	69	1	68	1																
1	24	62	900	50	90	70	0	0	0	160	540	20	110																				
1	31	62	200	0	0	0	0	70	20	20	90	50	180																				
2	7	62	400	0	0	0	0	60	40	80	170	40	60																				
3	7	62	200	0	0	0	0	0	20	80	150	20	60																				
4	4	62	1000	0	0	60	0	40	20	150	770	20	120	82	1																		
4	18	62	500	0	0	60	0	20	40	230	150	150	490																				
5	16	62	1400	0	0	20	20	160	90	790	360	250	540	69	2	68	1	67	1														
6	6	62	1700	0	0	140	0	50	0	1090	380	140	160	69	2	68	2	92	1														
6	20	62	2300	0	0	250	0	20	40	1640	350	350	230	69	3	68	2																
7	11	62	121600	121320	0	20	0	0	0	170	40	0	130	4	9																		
8	1	62	1600	0	0	80	40	80	0	1100	340	340	380	68	3	69	1	84	1														
8	29	62	1900	0	0	250	0	40	0	1220	340	250	420	68	1	69	1	67	1	71	1												
9	5	62	800	0	0	80	0	60	0	410	290	250	120	68	1																		
9	19	62	300	30	0	70	0	60	0	110	0	260	20																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW YORK

MAJOR BASIN NORTHEAST

MINOR BASIN LOWER HUDSON RIVER

STATION LOCATION HUDSON RIVER BELOW
POUGHKEEPSIE, NEW YORK 018

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	4	61	19	18	29	13	58	13	26	10	46	0	0	3											4							0	0
11	1	61	29	39	58	13	56	10	19	5	33	0	0	0											0							0	0
11	15	61	19	22	29	19	58	7	26	5	47	0	0	0											5							0	0
12	13	61	56	23	19	20	29	8	26	5	44	0	0	1											0							0	0
12	20	61	29	31	19	22	36	6	41	6	35	0	0	31	11	3									1							0	0
1	3	62	56	24	19	9	29	9	58	7	51	0	0	12	11	1									0							0	0
1	24	62	19	15	29	10	58	10	36	7	58	20	0	4											0							0	0
1	31	62	2	8	29	7	19	7	92	6	72	20	0	6											0							0	0
2	7	62	19	10	56	7	26	7	29	6	70	0	0	1											1							0	0
3	7	62	19	17	29	13	92	10	85	7	53	0	0	0											1							0	0
4	4	62	36	17	19	10	92	8	88	5	60	0	0	1											0							2	0
4	18	62	92	9	36	8	58	8	29	8	67	20	0	1											1							0	0
5	16	62	56	22	92	11	58	10	29	8	49	50	0	5											15	76	3	50	1			1	0
6	6	62	56	42	58	30	29	8	87	4	16	0	0	95	11	5									124	51	5	50	2			0	0
6	20	62	56	35	58	32	57	24	25	1	8	0	0	153	22	5	2	2							7	50	1					0	0
7	11	62	19	34	56	17	29	12	58	7	30	40	0	122	11	5	16	3	17	1					13	50	2	51	1			0	0
8	1	62	26	17	56	15	29	12	82	7	49	0	0	4											2							0	0
8	29	62	26	22	56	10	28	10	82	9	49	0	0	92	11	5									33	50	3	51	2	52	1	0	0
9	5	62	28	17	58	11	56	11	26	11	50	0	0	90	11	4	17	2							9	50	2	51	1			3	0
9	19	62	29	35	56	14	19	7	58	5	39	0	0	64	11	4	22	1							9							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN LOWER HUDSON RIVER
STATION LOCATION HUDSON RIVER BELOW
POUGHKEEPSIE, NEW YORK 18

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END			TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY							TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS				
11	1	61	11	13	6394	167	64	103	2	12	22	2	2	16	2	9	6	1	12
1	3	62	1	15	7065	181	68	113	2	13	27	3	3	19	2	10	5	1	10
2	7	62	2	15	5182	228	83	145	3	15	32	3	3	24	2	13	6	2	12
3	14	62	3	23	5888	240	106	134	3	21	42	5	4	26	7	15	9	2	14
5	2	62	5	10	5066	157	90	67	5	24	27	3	2	20	2	10	7	1	16
6	6	62	6	18	5192	204	99	105	1	22	28	3	3	21	1	13	10	1	24
8	1	62	8	12	5251	209	87	122	2	19	24	3	2	18	1	17	9	2	14
9	5	62	9	17	7121	182	73	109	2	15	25	2	2	20	1	12	8	2	9

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN LOWER HUDSON RIVER
STATION LOCATIONHUDSON RIVER BELOW
POUGHKEEPSIE, NEW YORK 18

DATE OF SAMPLE MONTH	DAY	YEAR	TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND 1-HOUR mg/l	CHLORINE DEMAND 24-HOUR mg/l	AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
10	4	61	21.0	6.0	7.3	.7	11	.3	2.0	.1	6	46	87	25	10	23	-	-	12000
10	11	61	21.0	6.0	7.3	-	11	-	-	.1	6	45	85	25	32	50	-	-	2800
11	1	61	15.7	8.2	7.2	1.3	11	.2	2.0	.1	8	40	83	23	22	45	.0	136	1900
11	8	61	14.2	8.2	7.4	1.8	11	.3	2.3	.1	6	37	80	25	42	-	.0	133	2500
11	15	61	22.6	8.2	7.4	-	11	-	-	.1	6	40	85	25	40	-	.0	-	2000
12	13	61	5.6	10.2	7.3	-	-	-	-	.1	6	43	81	25	110	50	-	-	1100
12	20	61	4.0	10.6	7.4	-	17	1.2	4.7	.3	6	38	82	25	70	50	-	-	-
1	3	62	.8	11.4	7.5	-	30	1.2	4.5	.3	6	46	89	18	22	50	.0	-	820
1	24	62	1.2	10.1	7.1	3.0	35	1.3	-	.3	6	41	81	25	13	40	-	-	1100
1	31	62	.6	10.2	7.1	2.1	35	1.1	-	.3	8	42	83	25	10	50	.0	-	3500
2	7	62	.6	10.2	7.1	-	23	.6	3.1	.2	8	42	74	25	18	31	.0	-	1500
2	14	62	.6	-	7.1	-	25	.6	3.3	.2	6	44	74	25	12	30	.0	-	1200
2	28	62	.8	9.5	7.3	2.9	25	1.1	-	.3	8	50	76	18	13	30	-	-	1100
3	7	62	1.0	-	7.2	-	18	-	-	.2	6	44	68	25	19	40	-	-	400
3	14	62	1.0	8.0	7.1	3.2	21	.4	-	.3	6	47	82	25	18	40	.0	169	2400
3	28	62	4.2	10.6	7.2	-	20	.6	-	.3	6	41	70	25	27	27	-	-	700
4	4	62	6.0	10.4	7.2	-	16	.5	3.0	.3	3	45	71	12	70	30	-	-	1000
4	11	62	6.4	11.0	7.2	1.6	15	.5	-	.1	2	35	64	18	42	30	-	113	900
4	18	62	6.8	10.8	7.2	-	13	.6	-	.1	1	28	48	18	40	30	.0	90	2900
4	25	62	8.7	10.3	7.4	2.4	11	.3	3.1	.1	2	38	57	18	22	30	-	91	500
5	2	62	12.1	9.2	7.3	-	14	1.0	-	.1	3	40	65	18	17	30	-	-	*22
5	9	62	13.5	6.8	7.3	-	14	.7	-	.1	3	44	68	15	30	25	-	-	710
5	16	62	14.2	7.5	7.2	-	11	.3	-	.2	2	32	47	18	17	23	-	-	2800
5	23	62	16.5	6.4	7.2	-	10	.8	-	.1	6	36	56	18	17	25	-	-	1200
6	6	62	19.7	5.7	7.3	-	-	.3	1.6	-	2	37	56	-	25	30	.0	90	-
6	13	62	20.9	6.0	7.4	-	-	.6	-	.2	4	38	57	18	25	25	-	-	2700
6	20	62	22.5	5.5	7.3	1.2	12	.2	2.3	.1	6	43	64	18	20	30	-	-	720
6	27	62	22.7	-	7.2	-	10	-	-	.1	6	40	53	18	28	30	-	-	1800
7	11	62	24.3	4.4	7.3	-	-	-	-	.1	6	45	70	18	11	23	-	-	4000
8	1	62	24.0	5.3	7.4	.8	-	.4	2.0	.2	8	45	74	23	18	23	.0	113	9600
8	8	62	24.5	4.9	7.4	-	30	.6	3.0	.1	16	50	78	25	25	30	-	-	2400
8	15	62	23.5	5.0	7.4	-	28	.7	3.0	.1	16	50	78	25	24	-	-	-	6000
8	29	62	23.6	5.8	7.4	-	27	.8	2.9	.1	12	50	77	25	28	25	.0	145	-
9	5	62	23.6	5.7	7.5	-	30	.8	-	.1	16	50	80	25	23	35	.0	-	3600
9	12	62	22.7	6.0	7.4	1.0	29	.9	2.7	.1	12	44	80	25	32	35	-	-	11000
9	19	62	21.7	6.0	7.5	-	29	.7	2.2	.1	16	42	80	25	28	35	.1	-	3600
9	26	62	20.3	6.4	7.5	.8	28	.9	-	.1	16	42	78	25	35	35	-	-	6800

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Green Island, New York
Operated by U.S. Geological Survey

STATE	New York
MAJOR BASIN	Northeast
MINOR BASIN	Lower Hudson River
STATION LOCATION	Hudson River below Poughkeepsie, New York

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	3.220	5.740	7.180	3.310	9.040	8.800	79.800	48.200	7.480	2.560	5.410	3.660
2	2.880	5.640	6.240	3.930	8.790	9.450	78.800	38.000	6.640	2.000	5.680	2.530
3	4.990	5.930	5.030	6.200	7.440	10.000	51.600	31.900	4.290	3.860	5.920	1.300
4	5.740	5.130	6.430	6.660	8.100	9.040	38.000	28.300	3.070	1.710	3.530	1.740
5	6.180	4.510	11.400	7.070	7.370	6.930	30.800	24.300	5.410	1.950	2.490	2.970
6	6.120	5.210	15.300	5.880	8.860	8.250	26.800	22.500	6.500	3.540	1.990	4.830
7	5.350	7.990	15.700	9.040	10.600	8.400	30.300	21.300	7.410	2.810	4.540	4.120
8	3.580	7.980	13.500	14.500	10.500	8.030	63.900	18.900	6.700	2.460	8.510	4.120
9	3.660	7.250	11.900	18.400	9.200	8.560	64.800	16.500	5.080	2.120	7.110	2.740
10	5.130	6.370	8.830	13.800	8.170	7.280	53.000	15.800	3.450	4.760	6.970	2.600
11	5.030	4.550	6.430	10.200	6.730	7.650	45.400	13.700	3.330	4.420	8.680	3.720
12	4.940	3.860	7.840	9.200	4.900	6.800	36.000	9.760	4.880	3.860	5.920	4.510
13	5.240	3.250	8.660	7.440	6.530	11.800	29.000	9.490	5.190	4.140	4.420	4.550
14	4.780	5.920	8.400	7.140	6.600	16.100	39.000	8.370	5.510	2.810	5.620	4.740
15	4.290	5.510	8.640	6.560	6.600	17.100	36.900	10.600	5.410	2.700	5.570	4.200
16	4.510	5.990	6.600	14.800	7.880	16.600	29.500	12.400	4.510	2.120	5.350	2.490
17	4.640	6.970	5.090	19.000	6.930	17.100	26.400	12.100	3.150	3.530	5.410	2.230
18	4.880	8.680	4.320	13.800	6.140	17.400	21.900	12.400	2.880	4.120	4.880	4.290
19	5.130	7.040	6.880	11.500	4.900	17.100	18.600	10.800	4.470	4.460	2.740	5.240
20	5.130	5.970	9.040	11.000	6.600	19.400	18.900	8.760	4.460	4.550	2.850	4.880
21	4.380	6.370	9.040	10.100	6.260	22.900	17.700	8.070	4.610	3.290	4.640	4.830
22	3.290	6.180	8.880	8.720	7.140	22.900	16.700	9.410	5.030	2.530	4.510	4.200
23	2.630	5.990	8.400	10.600	6.930	28.500	18.500	9.570	1.720	2.230	4.380	2.630
24	4.200	6.760	7.440	10.800	7.210	27.700	27.600	8.440	3.000	4.970	3.860	2.440
25	4.830	13.500	4.550	10.800	6.660	25.500	27.400	7.990	3.990	4.880	3.140	3.920
26	4.880	12.000	4.530	10.200	4.920	24.400	23.800	8.370	5.670	4.740	2.230	4.640
27	5.740	7.020	6.730	12.400	7.040	25.100	19.400	6.970	4.990	4.620	2.230	5.010
28	3.410	9.320	7.800	14.200	8.250	25.900	20.100	5.740	4.950	3.410	3.650	6.000
29	3.290	7.690	7.650	11.100		25.800	21.200	7.040	4.600	2.600	4.640	5.350
30	3.950	6.900	7.010	10.400		31.300	31.900	6.060	3.780	2.630	4.970	3.890
31	4.640		5.350	9.960		43.100		5.860		4.880	4.860	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN ILLINOIS RIVER
STATION LOCATION ILLINOIS RIVER NEAR
GRAFTON, ILLINOIS 98

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END			TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY							TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS				
12	1	61	12	17	4950	213	72	141	2	18	26	2	2	22	0	7	5	2	12
1	1	62	1	8	70	*	-	-	-	-	-	-	-	-	-	-	-	-	-
8	23	62	9	16	3470	264	88	176	1	16	34	1	1	30	2	13	8	2	14

* LOW FLOW - NOT PROCESSED

687-228 O-63—23

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN ILLINOIS RIVER
STATION LOCATION ILLINOIS RIVER NEAR
GRAFTON, ILLINOIS 98

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMI-NATION		ALPHA						BETA						DATE OF DETERMI-NATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	18	61	11	1	0	1	2	2	2	2	0	8	17	11	17	14						
11	26	61	12	6	5	7	1	2	6	7	179	19	55	11	234	22						
12	4	61	12	12	26	16	0	2	26	16	95	28	31	14	126	31						
12	11	61	12	19	-	-	-	-	-	-	31	9	11	7	42	11						
12	18	61	1	2	1	3	1	2	2	4	37	13	31	11	68	17						
12	26	61	1	5	7	6	2	2	9	6	62	16	29	11	91	27						
1	2	62	1	12	16	8	1	2	17	8	28	16	31	11	59	19						
1	8	62	1	18	1	1	1	2	2	2	74	11	46	11	120	15						
1	15	62	1	26	0	1	0	2	0	2	27	8	53	11	80	14						
1	22	62	1	30	1	2	1	3	2	4	12	9	41	12	53	15						
2	5	62	2	14	6	4	0	2	6	4	78	14	43	11	121	18						
2	12	62	2	26	0	1	0	2	0	2	73	9	54	11	127	14						
2	18	62	3	6	1	1	3	2	4	2	42	12	52	15	94	19						
2	26	62	3	14	1	1	1	2	2	2	66	6	54	7	120	9						
3	5	62	3	16	1	2	1	2	2	3	84	14	46	14	130	20						
3	12	62	3	26	0	1	0	2	0	2	85	11	67	12	152	16						
3	19	62	3	30	0	1	0	2	0	2	49	9	61	11	110	14						
3	26	62	4	6	4	6	0	1	4	6	300	29	79	6	379	30						
4	2	62	4	13	13	14	0	2	13	14	110	39	57	7	167	40						
4	9	62	4	24	0	1	0	1	0	1	24	8	56	11	80	14						
4	16	62	5	23	0	1	1	2	1	2	8	11	31	13	39	17						
4	23	62	5	25	0	1	0	1	0	1	14	14	56	17	70	22						
4	30	62	6	4	0	1	0	2	0	2	17	10	30	13	47	16						
5	7	62	6	8	4	3	2	2	6	4	35	19	24	17	59	25						
5	14	62	6	21	0	1	2	2	2	2	0	24	11	13	11	27						
5	21	62	6	26	0	1	2	2	2	2	11	11	35	13	46	17						
5	28	62	7	2	0	1	0	1	0	1	10	11	47	15	57	19						
6	4	62	7	3	0	1	0	2	0	2	8	11	50	17	58	20						
6	11	62	7	13	1	1	3	2	4	2	16	7	18	5	34	9						
6	18	62	7	13	0	1	0	3	0	3	5	6	25	9	30	11						
6	25	62	7	23	1	1	1	2	2	2	18	11	28	14	46	18						
7	2	62	7	24	1	1	2	1	3	1	6	11	30	14	36	18						
7	10	62	8	6	0	0	2	2	2	2	8	7	36	11	44	13						
7	17	62	10	7	0	2	0	2	0	3	4	10	12	14	16	17						
7	23	62	8	20	0	1	1	1	1	1	9	5	19	6	28	7						
7	30	62	8	22	0	1	0	2	0	2	6	11	36	14	42	18						
8	6	62	8	28	0	1	0	1	0	1	9	10	37	14	46	17						
8	13	62	8	31	1	1	0	2	1	2	3	11	23	14	26	18						
8	20	62	9	5	0	1	2	2	2	2	3	11	36	15	39	19						
8	27	62	9	17	1	1	0	1	1	1	7	11	25	14	32	18						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN ILLINOIS RIVER
STATION LOCATION ILLINOIS RIVER NEAR
GRAFTON, ILLINOIS

98

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
9	4	62	9	19	0	1	1	2	1	2	27	10	25	13	52	16						
9	10	62	10	9	-	-	-	-	-	-	8	7	22	9	30	11						
9	17	62	10	10	2	2	2	2	4	3	13	26	30	15	43	30						
9	24	62	10	19	1	1	0	0	1	1	7	8	14	9	21	12						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN ILLINOIS RIVER
STATION LOCATION ILLINOIS RIVER NEAR
GRAFTON, ILLINOIS 98

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE - GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	18	61	2700	0	0	350	20	310	20	1840	190	310	150	71	3	69	2	68	2	51	1												
12	4	61	7800	140	110	480	0	560	200	5900	380	1780	650	71	6	51	2	60	1	25	1	57	1										
12	10	61	10500	90	180	410	0	380	0	8730	680	2630	680	71	3	67	1	69	1	12	1	68	1	51	1								
12	26	61	6900	0	0	200	0	320	0	5920	430	560	0	71	6	57	1	68	1														
1	2	62	6100	0	20	20	0	680	20	5110	200	250	50	71	6	51	2	57	1														
1	15	62	3700	0	0	40	0	2880	0	750	0	0	0	71	1	69	1	68	1														
2	5	62	1500	0	0	40	0	410	0	700	370	80	190	71	2	57	2																
2	18	62	14300	600	0	20	0	8510	310	4040	870	100	100	57	6	71	5	68	4	51	3	91	2	3	2	60	1	92	1				
3	5	62	8400	20	0	20	20	3180	0	3730	1470	90	90	57	5	88	3	91	3	51	2	87	1										
3	19	62	18000	0	0	250	0	780	340	16440	200	310	90	71	7	57	2	63	2	51	1	25	1										
4	2	62	700	0	0	70	0	180	50	360	50	110	50	71	1																		
4	16	62	34500	0	50	1200	0	3940	2220	14260	12790	2190	950	71	7	92	6	60	4	51	4	57	4	25	3	88	3	68	3	69	2	52	2
5	7	62	14900	0	0	320	*	2510	320	7720	2070	3290	1520	71	6	50	4	52	4	68	4	92	3	57	3	88	2	60	2	38	1	91	1
5	21	62	22200	120	0	750	*	3100	170	5630	210	580	120	50	7	68	5	71	5	51	4	57	3	59	2	24	1	56	1	69	1	60	1
6	4	62	2100	20	90	270	0	930	20	680	70	180	20	51	2	71	2	57	2	68	1	69	1										
6	18	62	5500	100	0	480	20	2110	0	830	1950	120	460	51	4	87	2	79	2	88	2	68	2	71	2	85	2	59	1				
7	2	67	12100	250	0	1490	0	6420	0	3520	370	410	0	51	5	67	5	59	4	52	3	54	3	68	2	69	2	38	2	24	1		
7	16	62	3300	0	40	870	0	370	20	750	1240	170	210	67	2	51	1	30	1	69	1												
8	6	62	900	100	0	170	0	170	20	410	0	120	0	51	1	69	1																
8	20	62	3100	170	0	270	0	1740	20	290	620	330	40	51	4	52	2	87	1	88	1	67	1										
9	4	62	3000	40	0	250	0	1760	0	210	750	40	120	51	3	52	2	88	2	87	1	57	1	56	1								
9	17	62	500	10	0	70	0	30	0	90	300	70	310																				
*5	7	62					1980																										
*5	21	62					12250																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN ILLINOIS RIVER
STATION LOCATION ILLINOIS RIVER NEAR
GRAFTON, ILLINOIS 098

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	18	61	56	33	58	19	83	18	26	11	19	0	0	26	17	2	21	1							5	50	1					0	0
12	4	61	83	69	82	8	56	3	92	2	18	680	0	0											1							0	0
12	10	61	83	70	56	6	92	5	71	5	14	70	0	35	2	3									6	51	1					0	1
12	26	61	83	74	56	7	58	5	26	2	12	180	0	16	17	1									2							2	0
1	2	62	83	74	62	3	71	3	58	2	18	20	0	1											1							0	0
1	15	62	82	25	70	8	26	5	58	5	57	0	20	3											0							0	0
2	5	62	83	19	71	17	92	9	36	6	59	40	0	0											0							0	0
2	18	62	88	22	92	13	85	9	21	9	47	410	0	4											0							0	0
3	5	62	71	33	88	10	65	10	85	10	37	40	0	2											0							2	0
3	19	62	82	93	62	1	70	1	92	1	4	0	10	1											0							0	0
4	2	62										0	0	0											1							0	0
4	16	62	82	54	92	30	26	2	89	2	12	20	0	39	21	3	2	1	46	1					32	50	3	51	2	76	1	0	0
5	7	62	92	28	82	16	26	5	80	4	47	60	0	1											18	50	2	76	2			0	1
5	21	62	82	38	26	20	23	18	27	5	19	0	0	87	2	3	11	3	17	1	15	1			11	51	1	50	1	52	1	0	0
6	4	62	82	38	26	22	58	10	56	6	24	0	0	34	11	2	17	2	2	1					3							0	0
6	18	62	65	17	16	16	26	11	82	10	46	0	0	120	2	4	11	2	13	2					24	50	3	51	1			0	10
7	2	62	20	84	30	9	26	5	58	1	1	40	0	327	17	6	2	4	22	1	21	1	18	1	6	50	1					0	0
7	16	62	20	66	26	15	58	8	56	2	9	0	0	25	17	2	22	1							4							0	0
8	6	62	82	29	56	20	26	8	58	6	37	0	0	15	17	1	2	1							0							6	0
8	20	62	20	71	82	11	26	7	58	4	7	0	0	1060	17	7	2	6	18	5	21	4	22	3	42	50	4	76	2			0	0
9	4	62	20	43	26	21	82	21	56	8	7	0	0	467	17	6	2	4	15	3	22	2	18	1	30	50	4	76	2	51	1	0	1
9	17	62	20	19	53	16	18	12	65	8	45	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN ILLINOIS RIVER
STATION LOCATION ILLINOIS RIVER NEAR
GRAFTON, ILLINOIS 98

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
12	4	61	-	-	-	-	-	-	-	-	18	216	312	-	300	98	.7	396	-
12	10	61	-	-	7.5	-	-	-	-	-	17	228	312	10	150	85	.3	425	-
12	18	61	-	-	-	-	34	-	-	-	24	440	340	-	160	112	1.0	413	-
12	26	61	-	-	-	-	-	-	-	-	26	204	312	-	235	128	-	402	-
1	2	62	-	-	7.6	-	-	-	-	-	28	216	320	5	150	100	.9	430	-
1	8	62	-	-	7.4	-	-	-	-	-	21	180	272	5	125	80	.4	345	-
1	15	62	-	-	7.3	-	-	-	-	-	21	216	308	5	25	85	.1	495	-
1	22	62	-	-	7.4	-	-	-	-	-	20	232	323	5	45	85	.5	405	-
2	5	62	-	-	-	-	-	-	-	-	21	-	256	-	-	75	.5	308	-
2	12	62	-	-	-	-	-	-	-	-	18	152	248	5	-	70	.2	-	-
2	18	62	-	-	-	-	-	-	-	-	18	180	256	-	0	65	.2	259	-
3	12	62	-	-	-	-	-	-	-	-	22	172	276	5	150	90	-	363	-
3	19	62	-	-	7.3	-	-	-	-	-	19	170	244	10	60	66	.0	330	-
4	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	65	.8	-	-
4	9	62	-	-	8.0	-	-	-	-	-	10	168	236	10	-	65	.4	-	-
4	16	62	-	-	7.6	-	-	-	-	-	17	174	244	20	100	68	.1	327	-
4	23	62	-	-	-	-	-	-	-	-	17	188	272	10	55	85	.0	351	-
4	30	62	-	-	-	-	-	-	-	-	9	264	320	10	25	60	.9	373	-
5	7	62	-	-	-	-	-	-	-	-	20	208	276	15	108	85	.0	425	-
5	14	62	-	-	8.0	-	-	-	-	-	9	254	300	5	38	86	.0	-	-
5	21	62	-	-	-	-	-	-	-	-	15	186	244	-	0	76	-	310	-
5	28	62	-	-	-	-	-	-	-	-	20	200	336	15	*25	75	.0	352	-
6	4	62	-	-	8.0	-	-	-	-	-	18	186	244	10	25	75	.0	354	-
6	18	62	-	-	-	-	-	-	-	-	18	176	236	20	25	65	.1	312	-
6	25	62	-	-	-	-	-	-	-	-	18	192	264	10	*25	65	.2	346	-
7	2	62	-	-	7.9	-	-	-	-	-	18	190	280	10	*25	85	.6	354	-
7	10	62	-	-	-	-	-	-	-	-	12	146	208	10	*25	-	-	-	-
7	23	62	-	-	-	-	-	-	-	-	19	152	216	10	25	65	.0	310	-
7	30	62	-	-	-	-	-	-	-	-	21	168	260	5	25	65	.2	315	-
8	6	62	-	-	7.9	-	-	-	-	-	21	180	240	5	*25	60	-	340	-
8	13	62	-	-	-	-	-	-	-	-	24	180	260	15	80	75	.0	-	-
8	20	62	-	-	-	-	-	-	-	-	23	168	240	5	-	75	.1	360	-
8	27	62	-	-	-	-	-	-	-	-	32	160	236	5	83	80	.3	341	-
9	4	62	-	-	7.6	-	-	-	-	-	20	160	220	10	25	85	.0	345	-
9	10	62	-	-	-	-	-	-	-	-	30	144	-	5	63	85	.1	354	-
9	17	62	-	-	-	-	-	-	-	-	32	152	212	10	105	85	.2	371	-
9	24	62	-	-	8.2	-	-	-	-	-	23	156	216	5	55	100	.1	357	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Meredosia, Illinois
Operated by U.S. Geological Survey

STATE	Illinois
MAJOR BASIN	Upper Mississippi River
MINOR BASIN	Illinois River
STATION LOCATION	Illinois River near Grafton, Illinois

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	52.800	21.800	29.400	13.000	22.000	35.800	85.000	29.100	25.900	8.220	11.600	6.840
2	52.400	23.900	28.600	12.000	25.000	34.900	84.600	28.100	24.900	9.050	10.000	6.990
3	51.000	24.400	27.800	13.000	28.000	33.800	79.800	28.400	23.400	8.790	9.940	7.400
4	49.100	26.600	27.000	12.500	30.000	33.800	78.300	27.700	18.800	12.000	9.150	8.100
5	47.300	26.900	26.600	13.000	35.000	35.000	75.300	28.400	20.000	13.000	9.350	7.640
6	46.200	27.300	25.800	19.000	37.000	35.200	71.900	27.900	20.500	13.800	8.700	7.620
7	44.400	29.700	24.900	20.000	40.000	34.800	71.000	26.800	17.600	13.900	9.200	7.050
8	42.200	30.100	23.700	21.000	41.000	32.300	67.600	28.200	24.400	13.900	9.130	7.890
9	39.900	29.000	21.100	22.000	40.700	32.800	64.600	29.500	20.000	14.200	9.690	7.540
10	38.100	28.700	19.400	24.600	40.600	31.400	62.100	30.200	23.600	14.500	10.500	7.660
11	36.100	27.800	18.800	26.000	42.900	33.000	59.000	27.000	24.100	14.200	10.600	7.850
12	34.800	26.800	19.300	24.900	43.200	34.600	57.700	30.900	25.000	12.100	10.000	6.890
13	33.500	26.000	19.400	23.000	41.600	36.900	56.600	32.000	24.900	12.100	9.740	7.740
14	31.900	24.400	17.800	22.000	41.300	40.400	54.800	33.000	24.800	12.600	9.400	7.180
15	29.800	21.500	17.700	21.000	40.500	42.800	53.600	33.800	25.400	12.800	9.310	6.610
16	28.000	19.800	17.400	20.500	40.100	48.000	51.800	33.900	25.400	15.700	8.830	6.860
17	27.000	19.900	18.400	20.000	40.200	51.500	50.100	33.800	25.200	22.500	8.870	6.670
18	25.300	21.000	18.400	19.000	40.000	53.400	48.400	33.600	24.100	20.400	8.520	6.270
19	21.400	21.200	18.700	18.500	39.500	54.100	46.400	34.100	21.000	18.200	8.210	7.320
20	18.600	22.600	19.100	18.000	38.200	55.600	44.000	33.800	15.700	18.400	7.380	6.800
21	17.200	23.900	19.100	17.500	37.900	58.500	41.800	33.200	15.400	18.200	6.220	6.050
22	16.900	25.900	18.700	17.000	37.400	66.200	40.600	33.000	15.000	18.900	6.660	5.500
23	16.300	28.100	19.000	17.000	36.800	68.300	39.000	31.900	14.400	18.600	7.160	5.000
24	16.400	29.700	19.000	17.000	36.000	73.400	37.000	30.300	14.100	18.900	7.040	4.700
25	14.200	30.200	19.400	18.000	35.400	77.300	35.200	29.500	13.200	19.000	7.700	6.440
26	13.800	30.100	21.700	19.000	35.400	81.500	34.300	28.300	12.700	18.100	8.120	6.010
27	15.000	29.700	21.600	21.000	36.000	84.500	32.800	27.000	12.600	16.800	7.480	5.520
28	14.300	29.100	20.400	22.000	36.500	86.800	31.500	27.600	11.700	15.200	7.260	5.870
29	14.100	29.500	17.500	21.000		90.500	30.500	27.500	10.500	14.100	7.340	6.670
30	14.900	29.400	15.000	20.000		87.500	29.500	27.900	9.050	13.300	7.090	7.000
31	17.500		14.000	20.000		85.800		27.300		12.300	6.850	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN ILLINOIS RIVER
STATION LOCATION ILLINOIS RIVER AT
PEORIA, ILLINOIS 67

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA								DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL						ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±			MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	13	-	-	-	-	-	-	5	6	20	8	25	10								
10	9	61	10	16	-	-	-	-	-	-	4	11	21	15	25	19								
10	16	61	10	31	-	-	-	-	-	-	5	9	15	14	20	17								
10	23	61	10	31	-	-	-	-	-	-	8	12	30	15	38	19								
10	30	61	11	6	-	-	-	-	-	-	20	12	35	14	55	18								
11	6	61	11	17	-	-	-	-	-	-	8	12	48	16	56	20								
11	13	61	11	22	-	-	-	-	-	-	66	12	28	10	94	16								
11	20	61	11	30	-	-	-	-	-	-	0	10	25	15	25	18								
11	27	61	12	1	2	2	2	2	4	3	50	10	46	11	96	15								
12	4	61	12	12	-	-	-	-	-	-	16	13	22	14	38	19								
12	11	61	12	19	-	-	-	-	-	-	12	12	18	14	30	18								
12	18	61	12	28	-	-	-	-	-	-	10	11	34	16	44	19								
12	26	61	1	3	1	1	0	2	1	2	72	10	31	11	103	15								
1	2	62	1	9	-	-	-	-	-	-	32	12	53	16	85	20								
1	8	62	1	17	-	-	-	-	-	-	23	11	40	16	63	19								
1	15	62	1	25	-	-	-	-	-	-	33	11	42	15	75	19								
1	22	62	1	31	-	-	-	-	-	-	25	8	48	12	73	14								
1	29	62	2	6	-	-	-	-	-	-	12	11	40	15	52	19								
2	5	62	2	15	-	-	-	-	-	-	6	5	21	8	27	9								
2	12	62	2	19	-	-	-	-	-	-	26	8	52	12	78	14								
2	19	62	2	27	-	-	-	-	-	-	48	12	66	16	114	20								
2	26	62	3	6	1	1	0	3	1	3	43	22	57	27	100	35								
3	5	62	3	16	-	-	-	-	-	-	30	8	58	12	88	14								
3	19	62	3	26	-	-	-	-	-	-	137	8	86	7	223	11								
3	26	62	4	4	1	1	0	1	1	1	99	7	57	7	156	10								
4	2	62	4	19	-	-	-	-	-	-	31	5	44	7	75	9								
4	9	62	4	24	-	-	-	-	-	-	32	12	38	14	70	18								
4	16	62	4	30	-	-	-	-	-	-	22	11	34	14	56	18								
4	23	62	5	24	1	1	1	2	2	2	26	12	29	15	55	19								
4	30	62	5	31	-	-	-	-	-	-	31	28	36	30	67	41								
5	7	62	6	8	-	-	-	-	-	-	3	15	28	19	31	24								
5	14	62	6	26	-	-	-	-	-	-	39	13	46	14	85	19								
5	21	62	6	27	-	-	-	-	-	-	2	11	35	14	37	18								
5	28	62	6	30	0	1	1	1	1	1	14	7	52	8	66	11								
6	4	62	7	3	-	-	-	-	-	-	2	10	33	14	35	17								
6	11	62	7	10	-	-	-	-	-	-	9	11	24	14	33	18								
6	18	62	7	12	-	-	-	-	-	-	5	29	14	15	19	33								
6	25	62	7	23	0	1	1	2	1	2	16	11	3	14	19	18								
7	23	62	8	20	1	2	0	2	1	3	11	6	48	7	59	9								
7	30	62	8	22	-	-	-	-	-	-	1	11	25	14	26	18								

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN ILLINOIS RIVER
STATION LOCATION ILLINOIS RIVER AT
PEORIA, ILLINOIS 67

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	6	62	8	17	-	-	-	-	-	-	11	12	43	15	54	19						
8	13	62	10	8	-	-	-	-	-	-	11	12	30	15	41	19						
8	20	62	9	5	-	-	-	-	-	-	3	6	18	7	21	9						
8	27	62	9	12	0	1	0	2	0	2	8	13	12	17	20	21						
9	4	62	9	28	-	-	-	-	-	-	6	12	24	16	30	20						
9	10	62	10	12	-	-	-	-	-	-	11	11	22	13	33	17						
9	24	62	10	19	1	2	0	2	1	3	15	9	20	10	35	13						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN ILLINOIS RIVER
STATION LOCATION ILLINOIS RIVER AT
PEORIA, ILLINOIS 67

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	1500	0	0	100	0	210	20	700	480	120	40	71	2	69	1	68	1														
10	16	61	9500	20	40	1510	0	540	130	6330	930	1450	460	71	5	69	4	38	2	88	2	51	1	34	1	35	1	57	1	85	1	87	1
11	6	61	11000	20	40	1160	0	410	20	8570	750	730	350	71	6	69	4	92	3	38	2	68	2	25	1	34	1						
11	20	61	11300	0	20	150	0	390	0	10180	560	370	270	71	3	69	2	51	1	92	1	88	1										
12	4	61	10900	0	20	220	0	470	70	9720	360	1830	1010	71	6	57	1																
12	18	61	5900	0	0	160	0	470	40	5090	160	580	250	71	5	68	3	57	2														
1	2	62	3500	0	0	0	0	20	0	3000	480	100	100	71	4	68	3	67	1														
1	15	62	1900	0	0	0	0	100	0	1550	290	150	0	71	1	69	1	68	1														
2	5	62	400	0	0	20	0	50	20	230	90	0	0	69	1																		
2	19	62	400	0	0	0	0	130	0	90	130	580	420																				
3	5	62	600	200	70	20	0	0	20	110	130	90	180																				
3	19	62	600	0	0	40	0	150	0	150	310	20	80																				
4	2	62	2300	0	0	40	0	310	1550	230	150	40	20	62	4	51	1																
4	16	62	19400	210	0	700	0	2530	700	14370	910	1620	80	71	7	51	4	25	2	60	·2	57	2	56	1	77	1	91	1				
5	7	62	7200	0	0	2130	40	830	680	2220	1350	950	500	71	4	25	3	60	3	92	2	24	2	38	2	69	1	52	1	68	1	51	1
5	21	62	49900	11860	460	6540	*	2030	250	19070	3670	4680	1600	71	7	2	7	50	6	24	5	68	5	82	4	51	3	52	3	91	3	92	2
6	4	62	47100	410	500	6190	*	1540	500	32270	2440	4880	1040	50	5	24	5	92	4	71	3	69	3	38	3	52	3	34	3	25	3	88	3
6	18	62	37800	2200	830	6130	540	4100	500	17840	5630	7830	1200	71	7	51	5	24	4	68	4	3	4	92	4	35	3	87	3	88	3	16	3
7	2	62	63000	340	1100	5910	460	25830	930	16250	12150	10680	1980	68	7	88	6	71	5	52	5	51	4	92	4	24	4	38	4	91	4	87	3
7	16	62	14100	420	210	2450	380	380	80	7260	2870	2320	1440	68	5	71	4	35	3	38	3	92	3	88	3	69	3	91	2	50	2	3	2
8	6	62	12300	250	0	2770	0	4970	120	2940	1280	1740	170	51	5	68	5	52	4	38	4	88	2	87	2	69	2	25	2	35	1	24	1
8	20	62	17600	500	0	6090	80	2530	170	5710	2530	5260	410	68	6	38	5	51	4	88	4	87	3	25	2	44	2	71	2	40	2	35	1
9	4	62	74900	1010	380	8820	510	26460	0	24350	13340	15700	3800	51	8	68	8	87	6	88	6	38	5	71	4	69	4	52	4	40	3	26	3
9	17	62	28700	1080	40	3960	*	2860	790	10970	7040	4350	750	68	6	88	5	87	4	38	4	50	4	51	4	71	4	69	4	92	3	60	3
*5	21	62					6030																										
*6	4	62					3300																										
*9	17	62					1950																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ILLINOIS

MAJOR BASIN UPPER MISSISSIPPI RIVER

MINOR BASIN ILLINOIS RIVER

STATION LOCATION ILLINOIS RIVER AT

PEORIA, ILLINOIS 067

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																		NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														ROTIFERS											CRUSTACEA								
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT				1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	56	56	58	26	83	7	26	3	8	0	10	78	21	3	11	3	2	2	17	1			9	50	1					0	0
10	16	61	83	46	58	28	56	24		1	1	0	0	90	21	4	2	2	11	2					17	50	2	76	2			0	0
11	6	61	83	41	56	24	92	10	58	10	15	20	0	27	17	2	11	1							2							0	0
11	20	61	83	95	56	2	26	2		1		0	0	0											0							0	0
12	4	61	83	74	56	6	92	4	47	4	12	20	0	15	11	1									1							0	0
12	18	61	83	40	82	27	26	8	92	4	21	0	0	4											0							0	0
1	2	62	95	37	83	19	92	9	26	6	29	0	0	1											0							0	0
1	15	62	26	10	56	9	83	8	58	6	67	0	0	1											0							0	0
2	5	62	95	13	26	10	56	8	82	8	61	0	0	0											0							0	0
2	19	62	83	33	56	11	26	10	92	9	47	0	0	0											1							0	0
3	5	62	95	10	92	10	86	9	83	8	63	50	0	1											1							0	0
3	19	62	82	10	86	9	92	7	64	7	67	0	0	1											0							4	0
4	2	62	83	19	92	13	56	17	86	7	44	0	0	2											0							0	0
4	16	62	82	39	83	8	88	7	92	5	41	20	20	9											6	50	1					0	0
5	7	62	83	34	92	18	56	10	82	9	29	20	10	1540	2	8	11	3	21	2	7	1			102	50	5	76	5			1	0
5	21	62	83	32	82	28	56	19	26	13	8	340	20	1030	17	7	1	5	21	5	2	5	11	5	363	50	5	76	5			0	1
6	4	62	83	40	56	17	58	16	92	5	22	0	30	1570	2	8	11	6	17	6	22	6			467	50	7	76	5			0	0
6	18	62	83	63	26	10	56	6	58	6	15	40	20	682	2	7	17	6	11	5					104	76	5	50	5			0	0
7	2	62	26	34	58	32	56	16	83	5	13	340	0	1910	2	8	17	6	21	5	11	5	22	4	118	50	5	73	4	76	1	0	0
7	16	62	26	35	56	20	83	11	58	11	23	40	10	150	17	4	11	4	21	3					19	50	3					0	0
8	6	62	26	80	56	8	80	2	58	2	8	0	0	1540	21	8	15	6	17	5	2	5	22	4	47	50	4	76	2	51	1	6	0
8	20	62	26	77	82	6	56	4	70	2	11	0	0	91	11	4	2	3	22	1	18	1			0							0	0
9	4	62	26	61	56	11	65	6	82	4	18	0	0	174	2	4	15	3	22	3	17	2	11	1	0							0	0
9	17	62	26	51	82	11	56	6	71	6	26	0	0	808	15	7	2	5	21	5	17	5	22	4	60	50	5	72	2	53	2	0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE	ILLINOIS
MAJOR BASIN	UPPER MISSISSIPPI RIVER
MINOR BASIN	ILLINOIS RIVER
STATION LOCATION	ILLINOIS RIVER AT PEORIA, ILLINOIS

67

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	28	61	12	5	5003	174	38	136	0	6	23	3	2	17	1	4	1	1	3
1	2	62	1	10	4922	284	81	203	2	14	45	3	4	35	3	9	3	2	6
2	5	62	2	13	4990	243	90	153	4	18	26	2	3	20	1	7	4	2	29
3	5	62	3	12	4876	229	78	151	0	10	41	3	4	33	1	9	3	2	13
5	14	62	5	21	4997	192	86	106	2	17	35	3	2	26	4	11	8	2	11
7	2	62	7	10	3879	393	170	223	2	30	65	8	6	47	4	25	24	2	22
8	6	62	8	13	4974	318	152	166	3	26	49	6	4	37	2	20	17	3	34
9	10	62	9	17	4921	269	84	185	1	13	38	4	3	27	4	15	7	2	8

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN ILLINOIS RIVER
STATION LOCATION ILLINOIS RIVER AT
PEORIA, ILLINOIS 67

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	15.0	7.0	7.5	-	-	-	-	-	18	130	220	35	45	-	-	-	2400
10	9	61	20.8	9.0	7.9	-	-	-	-	-	22	180	316	25	60	-	-	-	5500
10	16	61	16.7	9.4	7.9	-	-	-	-	-	30	206	350	25	85	-	-	-	2000
10	23	61	14.0	8.1	7.8	-	-	-	-	-	38	218	354	25	90	-	-	-	2000
10	30	61	14.0	9.5	7.9	-	-	-	-	-	39	216	346	25	110	115	1.2	454	270
11	6	61	11.2	9.5	7.9	-	-	-	-	-	28	214	366	20	80	-	-	-	550
11	13	61	10.2	11.0	7.9	-	-	-	-	-	23	228	370	25	75	110	.4	439	350
11	20	61	-	-	-	-	-	-	-	-	-	-	-	-	-	135	.8	474	-
11	27	61	8.3	11.5	7.8	-	-	-	-	-	23	224	358	25	120	130	1.4	443	750
12	4	61	-	-	-	-	35	-	-	-	-	-	-	-	-	110	1.2	416	-
12	11	61	-	-	-	-	-	-	-	-	-	-	-	-	-	115	1.4	447	-
12	18	61	-	-	-	-	-	-	-	-	-	-	-	-	-	90	1.6	449	-
1	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	110	1.4	456	-
1	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	95	.1	454	-
1	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	100	1.1	-	-
1	22	62	1.5	10.8	7.3	-	-	-	-	-	40	204	346	20	25	100	.0	408	410
1	29	62	2.0	10.2	7.3	-	-	-	-	-	35	208	344	15	10	-	1.4	446	75
2	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	98	-	380	-
2	12	62	-	-	-	-	17	-	-	-	-	-	-	-	-	80	.0	411	-
2	19	62	2.2	12.0	7.5	-	-	-	-	-	35	182	308	25	110	95	-	-	8000
2	26	62	2.0	12.3	7.6	-	-	-	-	-	30	200	334	20	50	105	.3	394	450
3	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	95	.4	415	-
3	14	62	-	-	-	-	25	-	-	-	-	-	-	-	-	-	-	-	-
3	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	65	-	294	-
3	26	62	7.0	11.3	7.6	-	-	-	-	-	14	132	218	40	130	-	-	-	350
4	2	62	8.7	10.1	7.7	-	-	-	-	.2	14	138	246	40	60	70	.1	300	90
4	9	62	10.0	10.4	7.9	-	-	-	-	.1	17	168	296	20	60	85	.2	363	60
4	16	62	9.2	12.3	8.2	-	-	-	-	-	20	184	316	20	50	100	.2	385	70
4	23	62	13.8	12.3	8.5	-	-	-	-	-	23	196	328	25	105	108	.1	450	300
4	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	105	.9	445	-
5	7	62	20.3	7.0	7.9	-	-	-	-	-	25	186	300	25	100	100	.1	404	400
5	14	62	-	-	-	-	-	-	-	-	-	-	-	-	-	76	.7	377	-
5	21	62	-	-	-	-	32	-	-	-	-	-	-	-	-	100	-	371	-
5	28	62	-	-	-	-	-	-	-	-	-	-	-	-	-	95	.5	389	-
6	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	110	-	366	-
6	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	344	-
6	18	62	26.0	8.9	8.0	-	-	-	-	-	24	164	272	20	150	80	.6	362	50
6	25	62	27.5	14.8	8.2	-	-	-	-	-	30	170	278	25	90	90	1.1	394	150
7	9	62	27.5	4.1	7.6	-	-	-	-	-	32	154	248	25	110	-	-	-	55

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN ILLINOIS RIVER
STATION LOCATION ILLINOIS RIVER AT
PEORIA, ILLINOIS 67

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	16	62	25.0	4.0	7.7	-	-	-	-	-	28	144	244	25	115	-	-	-	300
7	23	62	26.0	5.5	7.9	-	-	-	-	-	27	160	264	25	100	80	.9	329	100
7	30	62	23.2	5.7	7.9	-	-	-	-	-	31	164	260	25	90	85	.2	362	*50
8	6	62	26.0	3.5	7.7	-	-	-	-	-	-	156	260	25	70	-	-	-	*50
8	13	62	24.3	4.8	7.8	-	-	-	-	-	32	150	240	25	110	86	1.1	338	100
8	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
8	27	62	25.5	3.8	7.6	-	-	-	-	-	34	134	226	25	75	80	.0	300	350
9	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	80	1.6	327	-
9	10	62	23.0	5.2	7.5	-	-	-	-	-	37	142	230	25	100	-	-	-	300
9	17	62	23.1	4.9	7.5	-	-	-	-	-	35	148	236	25	120	-	-	-	200
9	24	62	20.0	6.5	7.8	-	-	-	-	-	37	150	238	25	95	75	2.0	361	300

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Kingston Mines, Illinois
Operated by U.S. Geological Survey

STATE	Illinois
MAJOR BASIN	Upper Mississippi River
MINOR BASIN	Illinois River
STATION LOCATION	Illinois River at Peoria, Illinois

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	35.700	14.900	20.500	9.000	10.000	19.600	48.700	18.100	14.900	7.720	8.290	6.030
2	35.200	15.700	20.000	8.580	11.000	20.900	46.800	18.700	12.900	7.940	8.330	6.000
3	34.300	14.200	19.200	8.980	12.200	21.800	45.000	18.600	12.700	8.950	7.590	5.760
4	30.900	14.000	18.800	8.750	13.900	20.500	42.800	18.000	11.700	9.400	7.150	5.630
5	24.700	14.300	17.100	8.650	15.700	20.100	42.400	18.100	11.000	11.400	6.350	5.400
6	21.800	15.900	14.900	9.320	17.000	19.500	40.700	17.100	11.000	13.600	6.350	5.440
7	21.200	17.400	14.300	11.700	18.000	18.900	39.500	17.100	10.700	13.200	6.830	6.430
8	21.100	17.100	14.700	13.800	20.400	18.000	37.500	15.800	10.400	12.900	7.530	6.070
9	20.800	16.100	14.800	16.200	20.200	16.300	37.200	16.200	10.400	12.700	7.860	6.070
10	18.500	17.800	15.000	21.800	22.000	18.000	37.400	17.500	11.000	11.400	7.590	6.150
11	14.500	18.000	15.000	19.600	22.200	21.200	37.200	18.500	10.400	10.500	7.440	6.080
12	16.100	19.400	15.000	13.900	21.600	25.800	35.500	21.100	9.010	8.700	7.200	5.670
13	18.500	16.800	14.200	12.500	20.100	32.600	34.000	22.600	9.380	8.980	7.280	5.570
14	18.600	11.300	14.000	12.000	19.900	37.700	32.200	23.500	19.300	9.140	7.150	5.240
15	18.100	10.800	13.400	11.500	19.400	39.400	31.800	25.100	21.400	13.200	6.870	4.920
16	16.700	11.000	13.400	10.500	20.300	38.300	30.000	25.800	20.900	17.600	6.690	5.060
17	18.000	11.000	13.700	10.000	20.300	37.800	28.500	25.300	19.900	15.900	6.110	5.190
18	14.800	13.300	13.900	9.700	20.100	38.000	27.900	23.600	16.400	17.200	5.820	4.930
19	12.000	16.400	14.200	9.300	20.500	39.500	26.600	23.500	10.200	17.800	5.570	4.690
20	10.500	19.600	14.300	9.000	19.600	43.200	25.400	22.300	9.520	17.000	5.390	4.750
21	10.600	18.700	13.800	8.800	19.800	51.600	23.200	22.200	9.300	16.700	5.390	4.680
22	10.800	18.500	13.800	8.600	19.300	55.100	23.000	21.100	9.430	15.700	5.120	4.800
23	11.100	19.100	14.300	8.400	18.900	58.000	23.000	19.100	9.500	15.700	5.000	5.130
24	11.800	19.200	14.200	8.200	18.600	61.000	22.500	19.300	9.770	14.500	5.180	5.020
25	12.300	19.400	13.800	8.000	18.200	60.900	22.100	19.600	9.600	14.900	5.200	4.900
26	12.100	20.900	13.000	9.000	18.400	59.000	21.200	18.100	9.650	14.900	5.500	5.020
27	9.900	22.100	12.500	9.500	19.200	57.600	20.700	18.100	9.610	12.300	5.630	5.300
28	8.380	21.400	12.000	10.500	19.000	54.800	19.900	18.300	9.410	10.300	5.380	5.000
29	8.000	20.900	11.000	10.000		54.200	19.700	17.800	7.990	9.400	5.180	4.140
30	11.700	20.300	10.000	9.700		52.500	18.800	16.800	7.560	8.720	5.230	4.550
31	14.000		9.500	9.500		50.400		16.600		8.320	5.610	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	WEST VIRGINIA
MAJOR BASIN	OHIO RIVER
MINOR BASIN	KANAWHA RIVER
STATION LOCATION	KANAWHA RIVER AT WINFIELD DAM, WEST VIRGINIA 68

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	5	61	10	23	-	-	-	-	-	-	4	4	11	6	15	7						
10	13	61	10	25	-	-	-	-	-	-	5	5	6	7	11	9						
10	19	61	10	31	-	-	-	-	-	-	8	11	4	13	12	24						
11	24	61	12	5	0	1	0	1	0	1	14	4	13	5	27	6						
11	3	61	11	14	-	-	-	-	-	-	4	5	8	6	12	8						
11	8	61	11	21	-	-	-	-	-	-	6	5	19	7	25	9						
11	17	61	11	29	-	-	-	-	-	-	5	6	18	8	23	10						
12	1	61	12	12	0	1	0	1	0	1	13	6	13	7	26	9						
12	7	61	12	14	-	-	-	-	-	-	27	6	9	7	36	9						
12	14	61	12	22	-	-	-	-	-	-	36	8	12	4	48	9						
12	21	61	12	29	-	-	-	-	-	-	63	12	11	6	74	13						
12	29	61	1	10	-	-	-	-	-	-	16	6	10	6	26	8						
1	4	62	1	15	-	-	-	-	-	-	7	5	11	7	18	9						
1	12	62	1	22	-	-	-	-	-	-	12	6	11	6	23	8						
1	19	62	1	29	-	-	-	-	-	-	8	7	5	7	13	10						
1	26	62	2	7	0	1	0	1	0	1	16	5	12	4	28	6						
2	5	62	2	14	-	-	-	-	-	-	15	5	13	6	28	7						
2	9	62	2	19	-	-	-	-	-	-	5	5	13	6	18	7						
2	16	62	2	27	-	-	-	-	-	-	18	5	17	6	35	7						
2	23	62	3	6	-	-	-	-	-	-	6	5	13	6	19	8						
2	26	62	3	13	3	2	0	1	3	2	25	6	10	4	35	7						
3	9	62	3	20	-	-	-	-	-	-	17	7	8	6	25	9						
3	16	62	3	30	-	-	-	-	-	-	55	6	43	5	98	7						
3	20	62	4	3	-	-	-	-	-	-	62	8	13	4	75	9						
3	28	62	4	5	0	1	0	1	0	1	8	4	9	5	17	6						
4	5	62	4	19	-	-	-	-	-	-	7	5	15	6	22	7						
4	18	62	5	1	-	-	-	-	-	-	4	5	13	6	17	7						
4	25	62	5	28	0	0	0	0	0	0	5	5	8	6	13	7						
5	10	62	6	19	-	-	-	-	-	-	0	7	6	9	6	11						
5	17	62	6	22	-	-	-	-	-	-	2	3	13	4	15	5						
5	24	62	6	27	-	-	-	-	-	-	7	5	14	7	21	9						
5	31	62	7	2	0	0	1	1	1	1	4	6	17	7	21	9						
6	8	62	7	6	-	-	-	-	-	-	7	5	21	6	28	8						
6	15	62	7	12	-	-	-	-	-	-	4	6	7	7	11	9						
6	21	62	7	20	-	-	-	-	-	-	8	3	13	4	21	5						
7	16	62	10	6	-	-	-	-	-	-	3	5	19	7	22	9						
8	10	62	8	30	-	-	-	-	-	-	4	5	7	7	11	8						
8	17	62	8	27	-	-	-	-	-	-	15	6	13	9	28	11						
9	3	62	9	18	-	-	-	-	-	-	2	12	5	18	7	22						
9	4	62	10	6	-	-	-	-	-	-	12	11	15	15	27	19						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE WEST VIRGINIA
MAJOR BASIN OHIO RIVER
MINOR BASIN KANAWHA RIVER
STATION LOCATION KANAWHA RIVER AT
WINFIELD DAM, WEST VIRGINIA 68

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMI-NATION		ALPHA						BETA						DATE OF DETERMI-NATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
9	14	62	10	12	-	-	-	-	-	-	27	5	25	9	52	10						
9	19	62	10	15	-	-	-	-	-	-	13	10	15	14	28	17						
9	26	62	10	18	0	0	1	1	1	1	9	6	13	8	22	10						

687-228 O-63—24

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WEST VIRGINIA
MAJOR BASIN OHIO RIVER
MINOR BASIN KANAWHA RIVER
STATION LOCATION KANAWHA RIVER AT
WINFIELD DAM, WEST VIRGINIA 68

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	13	61	100	0	0	0	0	0	0	70	50	0	0																				
11	9	61	100	0	0	20	0	0	0	0	60	20	60																				
11	20	61	300	0	0	90	0	110	0	50	20	0	110																				
12	4	61	400	0	0	20	0	20	0	20	310	0	120																				
12	15	61	1700	0	0	20	0	40	0	310	1370	40	750	84	2	92	1	69	1	82	1												
12	29	61	100	0	0	0	0	50	0	0	70	0	0																				
1	12	62	200	0	0	40	0	0	0	0	160	0	310																				
2	5	62	100	0	20	0	0	0	0	0	50	0	70																				
2	16	62	400	0	0	0	0	0	0	190	250	0	20																				
3	2	62	700	0	0	0	0	60	0	20	640	20	60	92	2	82	1																
3	16	62	4600	0	3370	20	20	40	0	150	970	20	410	16	5	92	1																
3	30	62	100	0	0	0	0	0	0	50	90	0	20																				
4	15	62	100	0	0	0	0	0	0	0	110	0	80																				
5	4	62	7200	110	80	110	0	400	0	6080	380	780	380	68	6	71	4	51	2	92	1												
5	17	62	6300	0	650	1880	0	800	0	2190	740	400	80	71	4	57	3	17	3	92	3	44	2	38	2	32	1	45	1	40	1		
5	31	62	725200	9990	170	790	0	2320	500	12400	990	1410	990	4	9	51	4	92	3	57	2	60	2	69	1	25	1	40	1	32	1	16	1
6	15	62	1600	0	0	250	0	230	0	640	500	230	40	68	2																		
7	2	62	6700	170	0	750	0	890	40	4040	790	790	80	68	5	51	2	25	2	57	2	84	1										
7	13	62	1900	0	0	330	0	1040	120	210	250	120	0	51	3																		
8	3	62	4100	340	0	570	0	230	110	2240	630	250	130	68	4	92	1	88	1	10	1	38	1	25	1								
8	17	62	2900	310	0	810	0	1530	0	170	40	250	0	51	4	25	3	3	1	54	1	68	1										
9	2	62	11000	7870	250	1410	0	1160	0	210	80	40	40	3	6	51	3	25	3	17	1	44	1	68	1								
9	14	62	2600	0	80	510	0	820	0	930	300	40	130	51	3	68	3																
9	28	62	100	10	0	80	0	30	0	10	0	40	0																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WEST VIRGINIA

MAJOR BASIN OHIO RIVER

MINOR BASIN KANAWHA RIVER

STATION LOCATION KANAWHA RIVER AT

WINFIELD DAM, WEST VIRGINIA 068

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH					NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	13	61										0	0	0											0							0	0
11	3	61										7840	0	0											0							1	0
11	20	61										90	10	47	15	3	6	2							0							43	0
12	4	61	62	92	92	1		1		1	5	520	10	12	6	1									0							1	0
12	15	61	47	77	62	7	92	5	36	2	9	0	0	0											0							0	0
12	29	61	47	14	92	12	64	8	70	7	59	0	0	1											0							2	0
1	12	62	92	11	36	8	51	7	62	7	67	70	0	0											0							1	0
2	5	62										0	0	0											0							0	0
2	16	62	36	16	92	10	2	8	51	7	69	0	0	0											0							0	0
3	2	62	92	30	36	12	45	9	62	6	43	100	0	0											0							0	0
3	16	62	62	32	92	20	2	7	36	6	35	890	0	0											0							0	0
3	30	62	2	9	92	8	36	8	62	6	69	0	0	0											0							0	0
4	15	62	92	15	47	10	65	6	36	6	63	0	0	0											0							1	0
5	4	62	92	29	27	26	82	8	2	4	33	20	10	5											0							0	0
5	17	62	82	63	91	16	92	14	70	1	6	40	50	74	15	4	11	2	17	1					5	76	1					1	0
5	31	62	28	35	58	33	82	17	56	11	4	0	0	116	22	5	17	4	2	3	11	1			6	76	2					0	0
6	15	62	27	43	28	7	92	5	56	5	40	0	10	5											2							0	0
7	2	62	27	41	28	26	47	12	82	3	18	0	0	48	15	4									0							4	0
7	13	62										0	0	7	20	1									0							0	0
8	3	62	28	67	27	20	58	5	56	2	6	0	0	446	2	6	1	4	7	4	21	4	17	3	124	76	5	53	4	50	2	2	0
8	17	62	27	85	26	3	92	2	71	2	8	0	0	117	15	5	20	1							0							0	0
9	2	62	27	61	28	16	57	4	71	4	15	0	0	0											0							0	0
9	14	62	27	44	28	10	71	6	2	6	34	0	0	0											0							0	0
9	28	62	27	50	71	6	2	5	82	5	34	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER

(Parts per billion)

STATE WEST VIRGINIA

MAJOR BASIN OHIO RIVER

MINOR BASIN KANAWHA RIVER

STATION LOCATION KANAWHA RIVER AT

WINFIELD DAM, WEST VIRGINIA 68

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	3	61	11	10	4040	419	292	127	3	41	161	11	21	108	21	20	12	9	46
12	7	61	12	14	2960	677	542	135	0	43	309	15	25	210	59	22	16	6	146
12	29	61	1	5	3120	400	265	135	8	34	143	23	20	96	4	16	8	6	50
1	26	62	2	2	4010	229	134	95	7	12	72	10	7	48	7	9	4	3	27
2	16	62	2	23	2150	600	401	199	8	36	177	20	21	129	7	20	12	8	140
2	28	62	3	16	2880	269	125	144	3	16	59	12	7	37	3	11	6	3	27
4	5	62	4	15	2830	491	316	175	6	38	142	16	14	84	28	22	16	6	86
4	26	62	5	10	4360	382	292	90	6	47	117	7	9	86	15	17	11	9	85
5	25	62	6	2	5020	451	357	94	11	64	161	5	16	111	29	28	18	14	61
7	5	62	7	12	3300	521	382	139	4	69	145	6	10	103	26	46	11	50	57
8	4	62	8	12	5310	527	413	114	4	74	174	5	16	122	31	25	12	17	107
8	30	62	9	11	4980	1223	1061	162	11	180	435	13	44	331	47	64	21	32	318
9	28	62	10	8	4990	831	678	153	14	136	312	10	31	237	34	34	14	20	148

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WEST VIRGINIA
MAJOR BASIN OHIO RIVER
MINOR BASIN KANAWHA RIVER
STATION LOCATION KANAWHA RIVER AT
WINFIELD DAM, WEST VIRGINIA 68

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	13	61	23.0	.0	7.4	10.5	36	-	-	2.1	82	48	112	10	2	28	-	191	-
10	19	61	21.0	.0	6.8	14.4	77	-	-	2.0	89	54	164	10	2	10	-	209	-
11	8	61	15.0	3.8	6.8	9.0	22	-	-	.6	36	42	78	10	2	10	-	181	-
12	1	61	-	-	-	-	-	-	-	-	2	-	-	-	-	28	-	-	-
12	7	61	7.0	8.1	6.9	1.5	22	-	-	1.2	52	42	80	10	2	5	-	162	*200
12	14	61	7.0	10.7	6.8	4.5	80	-	-	1.4	10	38	56	40	250	19	-	132	-
12	21	61	8.0	10.1	6.7	10.1	10	-	-	.4	8	28	44	10	2	-	-	139	27000
12	28	61	3.0	11.6	6.6	7.0	15	-	-	.4	20	34	20	10	2	-	-	141	2600
1	4	62	2.7	12.5	-	12.1	16	-	-	1.6	19	39	-	10	2	-	-	122	*100
1	12	62	2.0	13.7	6.7	7.6	-	-	-	-	11	29	36	10	2	-	-	-	-
1	18	62	3.0	13.7	6.6	7.0	16	-	-	.4	14	28	60	10	65	30	-	112	2500
1	25	62	2.0	12.1	6.6	6.2	42	-	-	2.0	8	24	46	10	170	23	-	146	-
2	2	62	3.0	12.0	6.7	6.5	41	-	-	1.4	6	24	48	10	20	-	-	156	6000
2	9	62	5.0	12.5	6.9	4.8	40	-	-	.6	12	31	54	10	-	39	-	162	170
2	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	42	-	-	*1
2	14	62	5.0	12.9	6.8	6.4	32	-	-	.8	16	34	60	60	20	-	-	132	-
2	21	62	6.0	11.5	6.8	3.7	22	-	-	1.6	15	35	64	10	40	31	-	126	-
3	1	62	9.0	11.0	6.5	3.2	110	-	-	.4	14	24	54	10	240	0	-	103	-
3	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60
3	23	62	10.0	11.4	6.9	4.5	68	-	-	.4	10	19	32	50	210	-	-	102	-
3	28	62	9.0	10.6	7.3	3.2	75	-	-	1.2	15	23	50	30	10	-	-	112	2500
4	5	62	13.0	9.6	7.3	4.0	52	-	-	1.2	18	32	70	10	10	34	-	128	-
4	18	62	-	-	-	-	-	-	-	-	-	18	-	-	-	26	-	-	-
4	25	62	16.0	8.0	6.9	5.8	8	-	-	1.2	23	32	68	10	10	35	-	162	450
5	4	62	20.0	6.6	7.0	-	12	-	-	1.6	22	36	66	5	15	-	-	168	-
5	10	62	21.0	3.4	6.6	3.3	28	-	-	3.2	33	37	95	10	5	29	-	-	880
5	17	62	22.0	.6	6.5	7.2	32	-	-	4.0	41	34	100	5	4	-	-	162	600
5	24	62	22.0	.0	7.3	6.0	67	-	-	3.2	45	59	90	5	5	38	-	-	-
5	31	62	27.5	.0	7.0	15.6	48	-	-	1.6	37	43	98	5	148	48	-	210	8
6	8	62	27.0	.0	6.8	8.4	16	-	-	3.2	56	50	122	10	8	19	-	-	-
6	14	62	-	.0	6.8	8.4	16	-	-	2.8	43	39	82	50	30	14	-	-	-
7	5	62	26.0	.0	6.7	-	16	-	-	-	51	47	112	-	25	-	-	-	-
7	11	62	26.0	.0	6.8	4.2	61	-	-	-	40	49	90	-	10	-	-	-	2700
7	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	41	-	-	-
7	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	610
7	26	62	26.0	.0	7.3	8.4	33	-	-	2.4	58	43	102	20	10	-	-	-	-
8	3	62	26.8	.1	6.9	8.0	14	-	-	2.4	35	45	84	20	15	-	-	-	-
8	8	62	28.0	.0	7.1	3.6	25	-	-	3.2	48	50	114	15	12	-	-	-	9100
8	10	62	-	-	-	-	-	-	-	-	-	2	-	-	-	90	-	-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WEST VIRGINIA
MAJOR BASIN OHIO RIVER
MINOR BASIN KANAWHA RIVER
STATION LOCATION KANAWHA RIVER AT
WINFIELD DAM, WEST VIRGINIA 68

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	16	62	27.0	.0	7.2	8.9	16	-	-	6.4	49	63	112	10	13	-	-	-	13000
8	23	62	28.0	.0	7.2	-	35	-	-	6.4	85	59	136	13	5	-	-	-	5500
8	29	62	28.0	.0	7.3	18.1	39	-	-	9.6	87	65	142	15	8	43	-	-	580
9	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-	-
9	6	62	-	.0	7.2	17.5	58	-	-	9.6	101	68	166	5	12	24	-	-	300
9	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	70	-	-	-
9	13	62	30.0	.0	7.0	31.0	76	-	-	12.8	122	51	182	10	15	29	-	-	*33
9	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1400
9	20	62	26.9	.0	7.2	13.3	56	-	-	9.6	90	64	158	10	9	38	-	-	-
9	26	62	23.2	.0	7.0	11.0	40	-	-	8.0	68	67	122	10	9	19	-	-	3700

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Charleston, West Virginia
Operated by U.S. Geological Survey

STATE	West Virginia
MAJOR BASIN	Ohio River
MINOR BASIN	Kanawha River
STATION LOCATION	Kanawha River at Winfield Dam, West Virginia

October	November	December	January	February	March	April	May	June	July	August	September

DATA NOT AVAILABLE AT PRESENT TIME

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	OREGON
MAJOR BASIN	CALIFORNIA
MINOR BASIN	KLAMATH RIVER
STATION LOCATION	KLAMATH RIVER NEAR KENO, OREGON

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DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	3	61	10	27	0	0	0	1	0	1	2	4	9	5	11	6						
10	17	61	10	30	0	0	0	1	0	1	5	5	6	5	11	7						
10	23	61	11	7	0	1	0	1	0	1	8	5	14	5	22	7						
10	31	61	11	15	0	1	0	1	0	1	3	4	18	5	21	6						
11	7	61	11	27	0	1	0	1	0	1	3	4	18	6	21	7						
11	14	61	12	1	0	1	0	1	0	1	8	5	8	5	16	7						
11	23	61	12	8	0	1	0	1	0	1	12	5	14	7	26	9						
11	28	61	12	8	0	1	0	1	0	1	22	5	17	7	39	9						
12	5	61	12	19	0	1	0	1	0	1	24	5	20	5	44	7						
12	11	61	12	26	0	1	0	1	0	1	30	5	23	5	53	7						
12	18	61	1	3	0	1	0	1	0	1	38	5	25	6	63	8						
12	26	61	1	11	0	1	0	1	0	1	43	5	30	6	73	8						
1	2	62	1	24	-	-	-	-	-	-	9	5	20	7	29	9						
1	8	62	1	26	-	-	-	-	-	-	30	6	20	6	50	8						
1	16	62	1	29	-	-	-	-	-	-	18	6	23	7	41	9						
1	23	62	2	9	1	1	1	1	2	1	21	5	23	5	44	7						
1	30	62	2	13	-	-	-	-	-	-	6	5	20	7	26	9						
2	6	62	2	19	-	-	-	-	-	-	12	6	18	7	30	9						
2	14	62	3	5	-	-	-	-	-	-	205	15	55	12	260	19						
2	20	62	3	6	-	-	-	-	-	-	227	17	85	8	312	19						
3	1	62	3	14	0	1	0	1	0	1	72	6	45	6	117	9						
3	5	62	3	26	-	-	-	-	-	-	28	6	32	8	60	10						
3	13	62	3	30	-	-	-	-	-	-	26	6	37	8	63	10						
3	20	62	4	5	-	-	-	-	-	-	25	7	52	8	77	11						
3	27	62	4	12	0	0	0	1	0	1	33	5	35	6	68	7						
4	2	62	4	19	-	-	-	-	-	-	19	6	29	8	48	10						
4	11	62	4	25	-	-	-	-	-	-	24	6	29	7	53	8						
4	17	62	4	30	-	-	-	-	-	-	12	5	28	8	40	9						
4	24	62	5	31	0	0	0	0	0	0	10	5	21	7	31	9						
4	30	62	6	5	-	-	-	-	-	-	10	6	26	8	36	10						
5	8	62	6	21	-	-	-	-	-	-	6	7	22	9	28	11						
5	16	62	6	22	-	-	-	-	-	-	5	3	23	4	28	5						
5	22	62	6	27	-	-	-	-	-	-	8	6	21	7	29	8						
5	30	62	7	2	0	1	0	1	0	1	1	7	10	8	11	11						
6	6	62	7	11	-	-	-	-	-	-	2	6	11	7	13	9						
6	19	62	7	20	-	-	-	-	-	-	4	3	19	4	23	5						
6	26	62	10	1	0	0	0	0	0	0	68	6	45	7	113	9						
7	3	65	8	1	-	-	-	-	-	-	5	7	13	7	18	10						
7	9	62	8	2	-	-	-	-	-	-	0	6	10	6	10	8						
7	16	62	8	20	-	-	-	-	-	-	0	3	13	2	13	3						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE OREGON
MAJOR BASIN CALIFORNIA
MINOR BASIN KLAMATH RIVER
STATION LOCATION KLAMATH RIVER NEAR
KENO, OREGON 78

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
7	24	62	8	21	0	0	0	0	0	0	3	5	10	6	13	7						
7	31	62	10	13	-	-	-	-	-	-	2	6	10	6	12	8						
8	8	62	8	31	-	-	-	-	-	-	4	5	8	6	12	7						
8	14	62	9	5	-	-	-	-	-	-	2	5	8	6	10	7						
8	21	62	9	6	-	-	-	-	-	-	5	5	14	7	19	9						
8	27	62	9	18	0	1	0	0	0	1	9	4	14	6	23	7						
9	4	62	10	13	-	-	-	-	-	-	4	5	11	6	15	8						
9	11	62	10	9	-	-	-	-	-	-	5	5	7	6	12	7						
9	18	62	10	16	-	-	-	-	-	-	2	5	11	6	13	7						
9	25	62	10	29	0	0	0	0	0	0	1	5	10	6	11	7						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OREGON
MAJOR BASIN CALIFORNIA
MINOR BASIN KLAMATH RIVER
STATION LOCATION KLAMATH RIVER NEAR
KENO, OREGON

78

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	3	61	8600	3870	0	700	0	60	0	2010	1930	1300	1640	1	4	71	4	3	3	84	3	25	2	69	1	87	1	68	1	79	1		
10	17	61	3700	2170	20	130	0	100	0	660	700	190	620	2	4	3	2	71	2	1	2	84	1										
11	7	61	19800	8700	100	850	0	230	0	7310	2650	4060	2710	2	6	5	5	1	3	84	4	71	3	69	2	88	1	68	1	25	1	38	1
11	23	61	3700	1390	40	190	0	20	0	1410	660	1160	1390	3	3	71	3	84	2	69	1												
12	5	61	40100	26460	540	9270	0	320	180	1710	1620	8690	6480	3	7	1	6	25	6	44	5	2	5	71	4	84	3	15	2	31	2	51	1
12	18	61	18100	13950	0	910	0	120	0	1410	1680	2010	1930	2	7	3	5	25	3	1	2	84	1	69	1								
1	2	62	5600	1160	0	2050	0	40	0	1570	810	1100	970	71	4	25	4	3	3	84	2	69	1										
1	16	62	37500	5310	0	15980	0	230	140	12920	2930	4050	810	25	7	71	6	3	5	24	4	1	3	44	2	84	2	69	2	51	1	68	1
2	6	62	9900	2960	0	5150	0	60	0	1200	520	750	580	25	6	3	5	71	3	84	1												
2	20	62	3200	60	0	1160	0	120	40	600	1220	520	2130	25	3	84	3	71	2	69	1												
3	5	62	28800	3310	0	8410	0	2440	170	8890	5550	3810	8840	25	6	51	4	3	4	1	4	88	3	84	3	92	3	44	2	87	2	79	2
3	20	62	50100	430	0	1240	0	250	20	45790	2420	3320	3170	71	9	68	5	25	3	84	1	88	1	69	1	3	1	1	1	57	1		
4	2	62	17300	910	0	1570	0	790	460	11180	2360	2570	1530	71	7	3	3	88	3	51	3	25	3	44	2	62	2	87	1	92	1	68	1
4	17	62	7000	440	80	1710	0	0	0	1920	2430	4390	2930	71	4	82	3	44	2	45	2	88	2	92	1	25	1	35	1	30	1	97	1
5	8	62	10200	2380	0	1240	20	390	0	3620	2570	1350	830	71	5	3	4	2	3	68	3	25	2	88	2	90	2	51	1	44	1	1	1
5	22	62	4800	40	110	760	0	740	0	1820	1350	1140	1180	71	4	57	3	30	1	24	1												
6	6	62	4200	890	0	730	0	40	40	520	2010	830	1240	25	2	3	2	71	2	88	2	87	1	82	1	90	1	1	1	92	1	2	1
6	19	62	5800	130	0	80	0	80	0	3880	1650	970	1690	68	4	71	4	88	2	90	1	82	1	87	1								
7	2	62	5500	30	0	1030	910	330	0	1740	1410	830	540	50	3	71	3	69	2	25	2	51	2	88	1	90	1	38	1	44	1		
7	16	62	1300	40	0	0	210	60	0	660	370	0	80	68	2	50	1	69	1														
8	8	62	3500	730	20	350	0	210	100	460	1660	540	620	2	3	71	2	87	1	90	1	79	1	82	1								
8	21	62	1900	0	0	150	0	310	0	990	460	210	120	68	3	51	2	71	1														
9	4	62	2000	20	470	320	0	340	0	230	610	410	20	11	2	71	1	79	1	26	1												
9	18	62	500	70	50	90	0	110	0	140	50	290	650																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OREGON
MAJOR BASIN CALIFORNIA
MINOR BASIN KLAMATH RIVER
STATION LOCATION KLAMATH RIVER NEAR
KENO, OREGON

078

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	3	61	82	14	46	14	49	9	56	6	57	12730	10	16	11	1									0							2	0
10	17	61	82	29	46	12	49	5	56	5	49	330	0	12	11	1									1							0	0
11	7	61	82	20	84	12	97	12	46	10	46	0	0	113	2	5	11	2							17	77	2	76	1			0	0
11	23	61	46	18	84	13	82	8	45	7	54	60	20	372	2	7	11	3							26	77	3	50	2	76	1	1	0
12	5	61	84	16	46	14	97	13	45	11	46	990	0	333	11	7									29	50	3	77	3			0	0
12	18	61	84	21	46	11	97	9	76	6	53	0	20	78	2	4									17	50	2	77	2			0	0
1	2	62	45	22	46	15	84	12	56	11	40	0	30	50	11	3	2	3							103	50	5	77	3			0	0
1	16	62	82	24	84	11	48	10	45	6	49	50	70	95	2	4	11	3							131	50	5					0	0
2	6	62	82	27	46	17	84	11	45	5	40	40	10	161	2	4	11	4							162	50	5	77	4	76	1	0	1
2	20	62	46	27	84	8	48	7	82	7	51	40	0	12	2	1									14	50	3	77	1			1	0
3	5	62	49	16	49	12	82	8	84	6	58	910	10	173	11	5	2	4	21	1					105	50	5	76	2	77	4	0	0
3	20	62	82	32	46	13	49	12	48	9	34	0	40	249	2	6	11	4	21	1	17	1			37	50	4	77	1	98	1	2	0
4	2	62	84	56	48	11	84	6	49	3	24	40	20	1230	2	8	11	5	17	1					57	50	4	76	2	77	2	0	0
4	17	62	84	26	83	10	36	10	97	8	46	40	0	46	11	3	2	1							13	50	2					0	0
5	8	62	83	24	82	15	30	7	48	5	49	0	10	47	11	3	7	1							0							0	0
5	22	62	83	95							5	40	0	49	11	3									1							0	0
6	6	62	83	43	82	6	76	5	36	4	42	0	0	62	11	3	2	2							1							0	0
6	19	62	82	22	23	15	30	13	76	5	45	0	0	172	11	5	17	3	7	1	21	1	2	1	2							0	0
7	2	62	26	15	82	14	76	10	16	6	55	0	0	40	11	3	17	2							22	51	3	76	1			2	0
7	16	62	76	19	82	7	46	7	83	6	61	0	0	106	11	4	17	2	15	2	2	1	21	1	22	51	3	52	2			0	0
8	8	62	83	46	46	12	76	5	84	4	33	0	0	267	18	6	11	2	17	1	22	1			11	53	2	50	1			0	0
8	21	62	26	40	82	8	76	8	36	5	39	0	0	87	11	3	21	3	16	2	17	1	22	1	4	76	1					0	3
9	4	62	83	49	58	17	16	5	26	5	24	0	0	5											0							0	0
9	18	62	83	24	16	10	76	8	56	7	51	20	0	2											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE OREGON

MAJOR BASIN CALIFORNIA

MINOR BASIN KLAMATH RIVER

STATION LOCATION KLAMATH RIVER NEAR
KENO, OREGON

78

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGENATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	12	61	10	21	5000	167	61	106	3	15	16	1	1	13	1	7	5	1	14
11	7	61	11	16	5784	132	36	96	2	12	7	1	1	4	1	3	2	1	9
12	11	61	12	19	5490	136	33	103	1	10	9	1	1	6	1	4	2	1	6
1	11	62	1	25	4098	208	48	160	1	13	15	1	1	12	1	6	3	1	9
2	13	62	2	21	5140	174	58	116	1	13	22	1	1	19	1	7	2	1	12
3	10	62	3	18	5173	119	35	84	2	9	11	1	1	9	0	4	2	1	6
4	10	62	4	18	5417	135	54	81	2	17	12	1	1	10	0	5	5	1	12
5	11	62	5	20	6683	161	48	113	1	15	13	1	1	10	1	6	4	1	8
6	19	62	6	29	5482	177	93	84	3	27	21	1	1	17	2	10	10	2	20
8	8	62	8	15	5112	105	42	63	1	12	14	1	1	12	0	4	2	1	8
9	11	62	9	20	5903	141	61	80	2	17	15	1	1	13	0	4	5	1	17

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE OREGON
MAJOR BASIN CALIFORNIA
MINOR BASIN KLAMATH RIVER
STATION LOCATION KLAMATH RIVER NEAR
KENO, OREGON 78

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	12	61	12.0	9.3	8.6	4.9	68	-	-	-	5	60	46	-	49	-	-	-	-
10	31	61	-	-	-	-	-	-	-	-	-	-	-	10	-	25	.1	158	-
11	6	61	6.0	10.4	7.7	5.3	55	-		-	6	70	54	-	72	-	-	-	-
11	14	61	-	-	-	-	-	-	-	-	-	-	-	10	-	34	.1	166	-
11	23	61	-	-	-	-	-	-	-	-	-	-	-	-	-	24	.1	169	-
11	28	61	-	-	-	-	-	-	-	-	-	-	-	5	-	54	.0	205	-
12	11	61	1.5	11.5	7.6	3.2	41	-	-	-	6	78	62	-	43	35	.1	263	-
12	18	61	-	-	-	-	-	-	-	-	-	-	-	-	-	43	.1	195	-
12	26	61	-	-	-	-	-	-	-	-	-	-	-	20	-	55	.1	-	-
1	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	14	-	-	-
1	9	62	4.5	11.0	7.6	3.8	17	-	-	-	4	60	42	-	32	-	-	-	-
1	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	28	.3	-	-
1	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	17	.0	-	-
2	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-
2	20	62	-	-	-	-	-	-	-	-	-	-	-	40	-	41	.0	-	-
2	21	62	-	-	-	-	27	-	-	-	-	-	-	-	-	-	-	-	-
3	20	62	-	-	-	-	-	-	-	-	-	-	-	10	-	76	.3	269	-
3	26	62	8.0	10.5	8.0	2.7	27	-	-	-	7	92	110	-	60	-	-	-	-
4	17	62	-	-	-	-	-	-	-	-	-	-	-	35	-	64	.0	211	-
4	24	62	14.0	8.9	8.2	4.2	34	-	-	-	7	68	80	10	32	70	.0	-	-
4	30	62	-	-	-	-	-	-	-	-	-	-	-	10	-	60	.0	179	-
5	8	62	-	-	-	-	-	-	-	-	-	-	-	5	-	60	.3	-	-
5	22	62	-	-	-	-	-	-	-	-	-	-	-	20	-	40	-	-	-
6	20	62	-	-	-	-	33	-	-	-	-	-	-	-	-	-	-	-	-
7	16	62	19.0	8.4	8.2	1.8	-	-	-	-	5	60	41	15	25	15	.1	105	-
8	1	62	18.0	8.3	7.6	1.7	-	-	-	-	4	66	50	-	25	-	-	-	-
8	8	62	-	-	-	-	-	-	-	-	-	-	-	20	-	20	.0	140	-
8	14	62	-	-	-	-	-	-	-	-	-	-	-	15	-	18	.0	130	-
9	4	62	17.5	8.0	7.4	2.8	-	-	-	-	5	70	50	-	-	-	-	-	-
9	11	62	-	-	-	-	-	-	-	-	-	-	-	10	-	36	.2	-	-
9	20	62	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-
9	27	62	14.5	8.4	7.9	2.1	-	-	-	-	4	70	50	-	25	-	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Big Bend powerplant
near Keno, Oregon
Operated by U.S. Geological Survey

STATE	Oregon
MAJOR BASIN	California
MINOR BASIN	Klamath River
STATION LOCATION	Klamath River near Keno, Oregon

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	1.190	2.220	2.840	2.330	1.490	1.380	.892	1.400	1.050	.705	.840	.970
2	1.540	2.500	2.850	2.340	1.380	1.300	1.720	1.530	.590	.700	1.240	1.010
3	1.550	2.560	2.840	2.340	1.050	1.190	2.010	1.730	.532	.712	1.050	.740
4	1.550	2.700	2.810	2.340	1.040	.792	2.230	1.420	.992	.714	.837	1.490
5	1.540	2.750	2.310	2.210	1.460	1.370	2.420	1.170	.872	.707	.766	1.310
6	1.600	2.810	2.400	2.010	1.260	1.290	2.850	.850	.804	.600	.972	1.590
7	1.270	2.780	2.330	1.970	1.230	1.330	2.840	1.360	.790	.708	.876	1.290
8	1.160	2.770	2.480	1.940	1.110	1.390	2.820	1.060	.740	.707	.862	.870
9	1.540	2.300	2.650	1.890	1.140	1.550	2.840	1.500	.698	.724	.786	.690
10	1.590	2.630	2.640	1.880	1.560	1.190	2.710	1.570	.688	.720	.788	1.220
11	1.720	1.690	2.710	1.880	2.120	1.080	2.820	1.230	.728	.689	.746	1.290
12	1.680	2.300	2.610	1.880	2.480	1.320	2.820	1.190	.711	.722	.755	1.320
13	1.730	2.770	2.280	1.870	1.430	1.250	2.810	.824	.708	.720	.854	1.360
14	1.600	2.810	2.330	1.880	1.380	1.310	2.760	1.460	.716	.718	.852	1.330
15	1.420	2.800	2.340	1.800	1.230	1.300	2.750	1.540	.716	.704	.880	.928
16	1.800	2.800	2.210	1.760	1.360	1.420	2.800	1.580	.720	.706	.785	.758
17	1.890	2.180	2.160	1.740	1.190	1.130	2.810	1.420	.705	.686	.785	1.780
18	1.990	2.290	2.150	1.390	.769	.942	2.820	1.420	.702	.710	.740	1.470
19	2.020	2.820	1.730	1.490	1.490	1.380	1.950	.950	.706	.707	.733	1.390
20	2.130	2.820	1.370	1.300	1.310	1.400	1.750	.632	.701	.700	.759	1.340
21	1.910	2.850	1.060	1.570	1.350	1.470	1.820	.950	.698	.704	.778	1.360
22	1.760	2.400	1.440	2.150	1.330	1.240	1.580	.971	.702	.700	.950	1.390
23	2.180	1.370	1.640	2.330	.747	1.460	1.990	1.040	.702	.687	.980	1.040
24	2.300	1.490	1.620	2.240	.616	1.150	2.030	1.060	.656	.670	.920	1.650
25	2.220	1.440	1.610	2.220	.851	.860	1.870	.978	.721	.689	.650	1.650
26	2.110	1.530	1.960	2.180	1.510	1.410	1.720	.546	.727	.706	.650	1.450
27	2.280	2.150	2.360	1.620	1.310	1.570	1.740	.796	.714	.713	.880	.676
28	2.090	2.400	2.340	1.380	1.400	1.690	1.240	1.110	.697	.714	.930	.623
29	2.170	2.850	2.340	1.630		1.740	.756	1.090	.684	.701	1.170	2.190
30	2.420	2.840	2.330	1.580		1.860	1.480	.738	.680	.712	1.120	1.420
31	2.190		2.320	1.580		1.410		1.090		.747	.980	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE OHIO

MAJOR BASIN OHIO RIVER

MINOR BASIN LITTLE MIAMI RIVER

STATION LOCATION LITTLE MIAMI RIVER AT
CINCINNATI, OHIO

90

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	3	61	10	27	5000	253	51	202	1	8	27	5	3	17	2	8	3	1	3
11	1	61	11	21	5000	358	146	212	4	20	63	15	9	37	2	25	12	3	19
12	11	61	12	28	5000	267	99	168	5	19	34	5	3	22	4	12	8	2	19
1	8	62	1	26	4957	189	44	145	0	3	31	10	5	15	1	4	1	0	5
2	1	62	3	7	5000	224	35	189	0	6	15	2	2	11	0	7	2	0	5
4	2	62	4	12	4605	186	51	135	1	12	21	3	2	16	0	7	3	1	6
5	8	62	5	21	5125	276	144	132	4	35	62	14	8	37	3	23	12	3	5
6	5	62	6	15	5750	237	112	125	2	20	51	14	7	29	1	19	8	1	11
7	3	62	7	11	5643	195	87	108	2	17	35	7	3	23	2	15	7	2	9
8	1	62	8	8	5003	148	63	85	1	9	30	8	3	19	0	12	2	1	8
9	5	62	9	12	4868	159	56	103	1	7	33	9	4	19	1	7	1	1	6

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN LITTLE MIAMI RIVER
STATION LOCATION LITTLE MIAMI RIVER AT
CINCINNATI, OHIO 90

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO	DAY	µµc/g	±	µµc/g	±
10	3	61	10	9	0	1	0	2	0	2	15	9	17	11	32	14						
10	10	61	10	16	1	1	1	2	2	2	4	8	16	11	20	14						
10	17	61	10	31	0	1	0	1	0	1	2	4	11	6	13	7						
10	24	61	10	31	0	1	0	2	0	2	0	8	14	10	14	13						
10	31	61	11	6	0	1	2	2	2	2	13	8	21	11	34	14						
11	7	61	11	15	0	1	1	2	1	2	0	8	28	11	28	14						
11	14	61	11	27	0	2	0	2	0	3	115	13	108	12	223	18						
11	21	61	11	29	1	1	2	2	3	2	9	11	21	14	30	18						
11	28	61	12	5	1	1	0	2	1	2	31	11	43	14	74	18						
12	5	61	12	8	1	1	0	1	1	1	62	10	59	11	121	15						
12	12	61	12	18	0	3	0	2	0	4	55	8	56	7	111	11						
12	19	61	12	26	1	1	0	1	1	1	45	6	44	6	89	8						
12	26	61	1	3	0	1	0	2	0	2	33	5	40	7	73	9						
1	2	62	1	9	-	-	-	-	-	-	6	10	13	14	19	17						
1	9	62	1	15	-	-	-	-	-	-	45	6	49	7	94	9						
1	16	62	1	22	2	2	0	1	2	2	236	11	115	8	351	14						
1	23	62	1	30	-	-	-	-	-	-	115	10	56	7	171	12						
1	30	62	2	6	-	-	-	-	-	-	22	6	36	8	58	10						
2	6	62	2	13	-	-	-	-	-	-	33	11	25	13	58	17						
2	13	62	2	19	-	-	-	-	-	-	0	11	25	14	25	18						
2	20	62	2	28	0	1	0	2	0	2	31	5	46	7	77	9						
2	27	62	3	9	-	-	-	-	-	-	70	8	44	7	114	11						
3	6	62	3	14	-	-	-	-	-	-	22	8	47	7	69	11						
4	4	62	4	19	-	-	-	-	-	-	39	6	47	8	86	10						
4	9	62	4	20	-	-	-	-	-	-	0	16	48	14	48	21						
4	16	62	4	24	1	1	0	2	1	2	4	8	30	10	34	13						
4	23	62	4	30	-	-	-	-	-	-	16	11	33	15	49	19						
4	30	62	5	31	-	-	-	-	-	-	16	13	0	13	16	18						
5	7	62	6	5	-	-	-	-	-	-	7	13	37	18	44	22						
5	14	62	7	11	-	-	-	-	-	-	9	12	13	14	22	18						
5	21	62	6	25	0	1	0	1	0	1	37	14	41	17	78	22						
5	28	62	6	27	-	-	-	-	-	-	153	39	68	9	221	40						
6	6	62	7	2	-	-	-	-	-	-	37	13	30	14	67	19						
6	13	62	7	9	-	-	-	-	-	-	13	12	25	15	38	19						
6	20	62	7	17	1	1	2	2	3	2	9	9	25	13	34	16						
6	27	62	7	20	-	-	-	-	-	-	28	11	58	13	86	17						
7	3	62	7	31	-	-	-	-	-	-	38	15	52	17	90	23						
7	11	62	8	6	-	-	-	-	-	-	3	4	20	6	23	7						
7	18	62	8	6	2	2	0	1	2	2	99	13	76	10	175	16						
7	25	62	8	15	-	-	-	-	-	-	14	11	42	15	56	19						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	OHIO
MAJOR BASIN	OHIO RIVER
MINOR BASIN	LITTLE MIAMI RIVER
STATION LOCATION	LITTLE MIAMI RIVER AT CINCINNATI, OHIO

90

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	1	62	8	22	-	-	-	-	-	-	1	11	24	13	25	17						
8	8	62	8	23	-	-	-	-	-	-	15	11	8	11	23	16						
8	15	62	8	29	-	-	-	-	-	-	0	11	17	14	17	18						
8	22	62	9	5	-	-	-	-	-	-	2	6	16	7	18	9						
8	29	62	10	24	-	-	-	-	-	-	12	12	7	14	19	18						
9	5	62	9	24	-	-	-	-	-	-	7	12	4	18	11	22						
9	12	62	10	4	-	-	-	-	-	-	32	11	83	15	115	19						
9	19	62	10	5	0	1	0	1	0	1	3	11	10	13	13	17						
9	26	62	10	15	-	-	-	-	-	-	20	11	21	14	41	18						

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NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN LITTLE MIAMI RIVER
STATION LOCATION LITTLE MIAMI RIVER AT
CINCINNATI, OHIO 90

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	3	61	1500	0	0	110	0	200	20	980	200	1100	380	68	3	71	2	57	1														
10	17	61	5200	40	40	370	0	310	0	2530	1930	580	500	68	4	82	3	69	2	71	2	81	2	80	1	87	1						
10	31	61	3300	0	0	160	0	1500	70	580	980	960	270	51	3	82	3	57	2														
11	21	61	800	0	0	0	0	40	0	580	170	0	20	68	2																		
12	5	61	800	20	50	20	0	180	0	110	410	20	110	51	1																		
12	19	61	1100	0	0	0	0	40	0	20	990	0	190	87	2	82	1	88	1														
1	2	62	600	0	0	60	0	40	0	330	150	0	40																				
1	16	62	1800	0	20	0	0	0	20	70	1720	380	2080	82	3	92	1	87	1														
2	6	62	300	0	0	20	0	0	0	0	250	20	200																				
3	6	62	100	0	0	0	0	0	20	20	90	0	110																				
4	4	62	700	0	0	20	0	40	40	20	560	0	20	91	1	85	1																
4	17	62	1700	0	0	80	0	0	360	950	300	80	110	71	3	60	2																
5	7	62	43500	0	210	1860	0	590	0	38800	2030	460	420	71	8	68	5	40	3	88	2	87	2	44	2	85	2	51	1	25	1	17	1
5	21	62	10200	80	1010	3760	0	760	0	3590	1010	1010	1520	68	5	24	4	17	3	25	3	57	2	45	2	38	1	51	1	87	1	88	1
6	6	62	37500	660	0	3850	0	3730	210	22150	6960	4970	620	68	8	51	5	87	3	79	3	38	3	25	3	41	3	3	3	90	2	30	2
6	20	62	69300	4180	0	6250	*	4600	950	35940	3060	8240	540	68	8	50	7	71	6	51	5	24	5	4	4	9	4	88	3	60	3	25	3
7	3	62	112100	1900	250	6050	*	4060	290	76630	4970	14740	1330	50	7	51	5	68	5	38	4	25	4	44	3	87	3	3	2	69	2		
7	18	62	7500	0	0	110	*	0	0	2190	3670	1270	2110	68	4	48	4	87	2	92	2	88	1										
8	8	62	132100	1120	80	66860	*	7660	540	40370	3110	10760	410	24	9	68	9	50	7	51	6	25	5	69	4	9	3	71	3	87	3	88	3
8	22	62	161000	2460	190	7470	*	4620	190	97460	14280	23180	620	68	9	50	8	88	7	71	5	51	5	38	5	87	5	24	5	1	4	25	3
9	5	62	133700	14730	300	11310	*	1220	130	79460	8820	16040	2410	68	9	71	8	50	7	4	6	69	6	88	6	2	5	38	4	40	4	24	4
9	19	62	89700	1160	16890	4930	*	10850	950	49230	3810	17430	830	71	7	16	7	68	7	69	7	51	7	25	4	50	4	88	4	60	3	87	3
*6	20	62					14280																										
*7	3	62					17970																										
*7	18	62					1560																										
*8	8	62					12380																										
*8	22	62					34360																										
*9	5	62					17770																										
*9	19	62					1860																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN LITTLE MIAMI RIVER
STATION LOCATION LITTLE MIAMI RIVER AT
CINCINNATI, OHIO 090

DATE OF SAMPLE MONTH	DAY	YEAR	DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) 1ST SPECIES	1ST PERCENT	2ND SPECIES	2ND PERCENT	3RD SPECIES	3RD PERCENT	4TH SPECIES	4TH PERCENT	OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES ROTIFERS NUMBER PER LITER	ROTIFERS GENERA AND COUNT LEVEL (See text for Codes) 1ST GENUS	1ST COUNT LEVEL	2ND GENUS	2ND COUNT LEVEL	3RD GENUS	3RD COUNT LEVEL	4TH GENUS	4TH COUNT LEVEL	5TH GENUS	5TH COUNT LEVEL	CRUSTACEA NUMBER PER LITER	CRUSTACEA GENERA AND COUNT LEVEL (See text for Codes) 1ST GENUS	1ST COUNT LEVEL	2ND GENUS	2ND COUNT LEVEL	3RD GENUS	3RD COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
10	3	61	26	29	82	24	27	12	23	11	24	90	0	25	18	2	15	1							0							1	1
10	17	61	36	23	26	15	82	13	21	9	40	0	0	15	2	2									0							0	6
10	31	61	36	90	26	2	65	2	64	2	4	0	0	7											1							0	1
11	21	61	26	53	36	14	64	11	65	4	18	0	0	9											0							0	0
12	5	61	36	35	65	7	92	4	64	3	51	110	0	0											0							0	0
12	19	61	36	18	65	17	64	11	71	9	45	0	0	5											0							0	0
1	2	62	36	23	65	16	71	10	70	5	46	0	0	2											0							0	0
1	16	62	36	51	92	8	65	7	62	5	29	90	0	0											0							0	0
2	6	62	65	23	36	14	86	5	92	4	54	20	0	1											0							0	0
3	6	62	36	19	65	16	64	12	70	4	49	90	0	0											0							2	6
4	4	62	86	23	65	13	52	12	51	9	43	0	0	0											0							0	0
4	17	62	82	24	67	18	51	15	71	8	35	0	0	0											0							0	0
5	7	62	82	75	71	5	65	5	51	4	11	0	0	44	21	2	6	2	2	1					5	50	1					5	1
5	21	62	27	50	51	10	71	10	65	6	24	0	0	34	15	2	2	1	21	1	13	1			3							1	1
6	6	62	26	19	65	18	16	13	76	6	44	120	0	0											0							0	0
6	20	62	23	42	26	20	82	14	27	7	17	40	0	11	2	1									0							0	1
7	3	62	26	16	82	12	65	11	16	6	55	170	20	18	15	2									1							1	0
7	18	62	26	32	92	14	32	6	65	6	42	0	0	0											0							0	0
8	8	62	23	44	26	25	82	11	16	1	19	0	0	7											0							3	0
8	22	62	23	80	26	8	70	5	82	4	3	0	0	0											0							0	0
9	5	62	26	33	82	26	23	26	27	4	11	0	0	75	17	3	2	2	7	1	22	1	15	1	0							0	0
9	19	62	82	47	26	16	27	14	23	12	11	40	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN LITTLE MIAMI RIVER
STATION LOCATION LITTLE MIAMI RIVER AT
CINCINNATI, OHIO 90

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	-	3.9	-	1.7	-	1.7	3.5	-	-	-	-	-	-	-	-	-	-
10	10	61	-	-	7.4	-	-	-	-	-	24	264	324	5	0	40	.0	-	-
10	17	61	-	-	8.1	-	-	-	-	-	24	174	230	-	0	39	.2	245	-
10	24	61	10.2	6.1	7.4	.9	-	2.3	5.2	-	24	204	256	10	0	45	.8	303	-
10	31	61	-	4.3	7.7	1.8	-	3.3	6.5	-	26	260	320	-	0	56	1.6	354	-
11	7	61	-	-	7.7	-	-	-	-	-	27	272	324	5	0	62	1.1	400	-
11	14	61	-	7.5	-	1.3	-	2.2	5.0	-	29	170	208	10	120	43	2.5	306	-
11	21	61	-	-	-	-	-	-	-	-	24	232	280	10	-	50	1.6	332	-
11	28	61	-	-	7.7	-	-	-	-	-	17	98	252	10	-	40	.3	307	-
12	5	61	-	-	7.7	-	-	3.8	7.1	-	17	200	252	5	-	40	1.1	299	-
12	12	61	-	-	7.6	-	-	-	-	-	15	74	200	-	-	35	.4	-	-
12	19	61	-	10.5	-	2.0	-	4.8	9.9	-	12	112	128	-	-	38	-	-	-
12	26	61	-	11.3	-	-	-	3.0	5.6	-	15	160	224	-	-	45	.2	-	-
1	2	62	-	-	-	-	-	1.1	5.0	-	16	228	296	5	-	63	.5	358	-
1	9	62	-	-	7.2	-	-	3.3	7.5	-	17	136	212	20	-	45	-	-	-
1	16	62	-	12.2	-	4.8	-	.8	8.4	-	-	-	-	-	-	-	-	-	-
1	23	62	-	-	-	-	-	4.6	11.1	-	-	-	-	-	350	42	-	-	-
1	25	62	-	6.4	-	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-
1	30	62	-	.6	-	.7	-	2.5	4.8	-	12	-	228	-	5	-	5.4	-	-
2	6	62	-	-	-	1.0	-	1.8	3.1	-	15	188	244	-	-	50	.0	320	-
2	13	62	-	12.4	-	1.8	-	1.0	2.1	-	-	-	-	-	-	-	-	-	-
2	27	62	-	-	-	10.2	-	2.6	7.3	-	-	-	-	-	-	-	-	-	-
4	4	62	-	-	-	-	-	-	-	-	9	140	212	-	-	40	.4	244	-
4	23	62	-	-	-	-	-	-	-	-	18	220	352	5	-	50	-	375	-
5	1	62	-	-	-	-	-	-	-	-	20	364	488	-	-	55	.0	476	-
5	7	62	-	-	-	-	-	-	-	-	16	232	280	5	-	40	.4	340	-
5	14	62	-	11.0	-	-	-	-	-	-	14	244	288	5	25	55	.6	371	60000
5	21	62	-	-	-	-	-	-	-	-	17	250	300	5	75	60	.8	368	150000
5	28	62	-	-	-	-	-	-	-	-	14	120	168	-	400	30	.5	185	18000
6	6	62	-	9.8	7.4	-	-	-	-	-	17	240	292	15	0	50	.9	364	58000
6	13	62	-	9.9	7.2	-	-	-	-	-	17	240	280	15	0	40	.5	345	46000
6	20	62	-	9.8	7.2	-	-	-	-	-	20	236	280	15	25	40	.2	341	-
6	27	62	-	10.7	7.7	-	-	-	-	-	24	228	268	15	0	40	-	329	150000
7	3	62	-	-	-	-	-	-	-	-	30	220	260	25	80	50	1.0	373	-
7	11	62	-	10.0	7.6	-	-	-	-	-	20	156	196	-	-	39	.0	252	12000
7	18	62	-	5.9	7.4	-	16	-	-	.2	12	120	160	20	275	25	.3	203	28000
7	25	62	-	7.8	8.0	-	18	2.6	6.1	.2	17	176	220	10	-	35	.6	259	9000
7	31	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400
8	1	62	24.0	11.5	6.9	-	27	1.9	-	.5	18	200	260	-	25	50	.5	351	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN LITTLE MIAMI RIVER
STATION LOCATION LITTLE MIAMI RIVER AT
CINCINNATI, OHIO 90

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9200
8	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*200
8	22	62	25.0	10.5	7.3	-	18	3.0	9.6	.2	22	216	256	10	25	48	.3	352	100
8	29	62	24.9	9.3	8.0	-	28	4.5	12.1	.1	23	228	284	10	45	46	.3	369	10000
9	5	62	23.1	7.7	7.8	-	26	2.8	7.1	.2	24	220	300	5	25	45	1.0	382	4000
9	12	62	21.9	12.0	8.0	7.5	17	4.3	14.9	.3	27	224	260	5	25	35	1.0	355	6800
9	19	62	19.2	9.6	7.9	4.4	22	2.8	9.2	.4	26	252	296	5	25	45	1.2	370	*200
9	26	62	17.2	10.5	8.2	2.8	18	2.4	7.1	.4	25	220	256	5	*25	40	1.2	345	3200

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Milford, Ohio
Operated by U.S. Geological Survey

STATE Ohio

MAJOR BASIN Ohio River

MINOR BASIN Little Miami River

STATION LOCATION Little Miami River at
Cincinnati, Ohio

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.142	.164	.360	.600	1.060	6.240	2.870	.838	.595	.130	.197	.121
2	.160	.153	.340	.600	.958	3.160	2.410	.784	.495	.134	.173	.177
3	.156	.150	.320	.622	.888	2.330	1.700	.575	.461	.162	.169	.209
4	.142	.172	.315	.634	1.010	1.940	1.270	.495	.461	.217	.162	.245
5	.139	.153	1.750	.700	1.670	1.840	1.110	.448	.452	.448	.151	.189
6	.136	.172	1.490	3.690	1.680	1.590	1.060	.430	.495	.290	.148	.181
7	.128	.153	.972	3.810	1.000	1.420	1.010	.430	.412	.245	.151	.158
8	.128	.142	.718	2.210	.808	1.610	.965	.443	.366	.221	.158	.140
9	.122	.132	.592	1.350	.874	4.270	.965	.412	.371	.294	.144	.134
10	.233	.128	.878	.743	.788	5.460	.937	.398	.312	.281	.130	.140
11	.495	.128	1.410	.616	.646	3.790	.804	.398	.308	.221	.130	.137
12	.495	.128	1.000	.658	.640	5.410	.754	.394	.299	.193	.127	.130
13	.495	.128	.854	.743	.670	4.280	.754	.380	.299	.217	.115	.130
14	.490	.142	.628	.736	.867	3.020	.772	.366	.290	.299	.112	.124
15	.473	.156	.528	3.000	1.040	2.340	.718	.348	.281	1.240	.112	.284
16	.468	.216	.534	3.970	.993	1.930	.650	.340	.254	1.410	.103	.290
17	.290	.407	3.720	1.950	1.210	1.620	.620	.326	.241	1.430	.103	.229
18	.153	.446	2.570	1.250	1.130	1.400	.595	.317	.229	.846	.103	.185
19	.132	.335	2.190	.993	2.120	1.290	.575	.312	.221	.515	.100	.154
20	.122	.262	1.980	.867	1.720	1.300	.555	.299	.201	.389	.100	.148
21	.122	.240	1.510	.808	1.350	8.200	.530	.326	.193	.335	.096	.130
22	.128	.240	1.170	10.000	2.120	6.930	.510	.666	.181	.620	.090	.121
23	.122	.678	1.280	5.860	4.070	3.380	.500	.407	.181	.620	.090	.118
24	.119	2.170	1.720	2.690	13.300	2.450	.490	.326	.181	.475	.090	.112
25	.116	1.240	1.140	1.920	5.160	1.930	.470	.281	.177	.380	.090	.112
26	.107	.821	.888	1.990	15.700	1.590	.452	.322	.165	.366	.090	.106
27	.122	.640	.874	4.280	21.600	1.340	.448	.773	.140	.308	.090	.115
28	.119	.528	1.200	3.130	16.700	1.130	.443	1.040	.154	.276	.148	.118
29	.110	.446	.881	1.980		1.030	.434	1.220	.144	.250	.124	.112
30	.104	.396	.712	1.540		.965	.430	.916	.130	.225	.103	.106
31	.110		.628	1.210		2.030		.706		.209	.103	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MASSACHUSETTS

MAJOR BASIN NORTHEAST

MINOR BASIN MERRIMACK RIVER

STATION LOCATION MERRIMACK RIVER ABOVE
LOWELL, MASSACHUSETTS

19

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	24	61	11	3	-	-	-	-	-	-	6	5	17	6	23	8						
12	1	61	12	12	0	1	0	1	0	1	22	5	29	5	51	7						
12	14	61	12	26	0	0	0	1	0	1	16	5	19	6	35	8						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MASSACHUSETTS
MAJOR BASIN NORTHEAST
MINOR BASIN MERRIMACK RIVER
STATION LOCATION MERRIMACK RIVER ABOVE
LOWELL, MASSACHUSETTS 19

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	24	61	1400	0	0	350	0	190	0	620	250	20	150	68	2	69	2	51	1														
12	1	61	300	0	0	20	0	100	0	20	100	0	100																				
12	14	61	400	20	0	90	0	50	20	0	180	20	140																				
6	28	62	29500	3520	80	11140	80	9190	1010	2650	1820	620	580	51	6	3	5	24	4	68	4	40	4	31	4	38	3	25	3	36	2		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MASSACHUSETTS

MAJOR BASIN NORTHEAST

MINOR BASIN MERRIMACK RIVER

STATION LOCATION MERRIMACK RIVER ABOVE
LOWELL, MASSACHUSETTS 019

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																							
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	24	61	58	41	56	19	9	2	92	2	36	170	0	110	11	4	17	3	2	1					2							0	0
12	1	61	92	15	93	6	56	6	58	5	68	20	0	8											1							2	0
12	14	61										50	0	6											0							2	0
6	28	62	47	54	28	9	92	7	56	7	23	0	0	1370	11	7	17	7	2	6	46	4	22	4	110	76	5	51	4	50	3	0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MASSACHUSETTS
MAJOR BASIN NORTHEAST
MINOR BASIN MERRIMACK RIVER
STATION LOCATION MERRIMACK RIVER ABOVE
LOWELL, MASSACHUSETTS 19

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
8	20	61	12	15	5000	314	109	205	3	25	41	7	5	26	3	14	8	3	15

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MASSACHUSETTS
MAJOR BASIN NORTHEAST
MINOR BASIN MERRIMACK RIVER
STATION LOCATION MERRIMACK RIVER ABOVE
LOWELL, MASSACHUSETTS 19

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	25	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14000
12	13	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Concord River at Lowell, Massachusetts
Operated by U.S. Geological Survey

STATE	Massachusetts
MAJOR BASIN	Northeast
MINOR BASIN	Merrimack River
STATION LOCATION	Merrimack River above Lowell, Massachusetts

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	2.040	1.890	4.790	3.300	4.600	3.920	34.900	14.900	5.290	1.580	1.970	1.460
2	3.090	2.010	4.110	3.550	4.200	4.200	49.500	16.500	5.090	1.600	1.800	1.110
3	2.830	1.840	3.580	3.760	3.700	3.600	48.900	15.800	4.430	1.480	1.850	1.260
4	2.880	1.380	3.950	3.640	2.830	3.090	39.600	15.400	4.490	1.230	1.310	1.770
5	2.660	.993	3.920	3.670	3.670	3.550	30.200	15.900	4.170	1.560	.371	1.830
6	3.050	1.810	4.240	3.330	4.010	3.860	26.000	14.400	4.170	1.560	1.930	1.810
7	2.800	2.110	5.160	3.610	4.170	4.050	25.600	13.700	5.740	1.320	1.930	1.890
8	2.340	3.130	5.530	4.920	4.170	4.210	29.700	12.900	6.230	.993	1.710	1.560
9	2.660	4.950	4.850	6.740	4.010	4.240	36.700	12.200	5.190	1.440	1.780	.548
10	2.470	4.720	3.800	6.620	3.580	4.050	38.600	10.600	3.830	1.460	2.390	1.520
11	2.390	3.480	4.400	6.340	2.970	3.520	35.000	8.750	4.240	1.600	2.510	1.600
12	2.110	2.600	3.890	5.940	3.210	4.300	30.000	7.700	4.370	1.620	2.600	1.520
13	2.310	3.590	3.670	4.950	3.300	5.800	25.900	6.890	3.890	1.560	2.630	1.510
14	2.160	3.550	3.890	4.050	3.240	6.440	24.000	7.380	3.730	1.420	2.720	1.530
15	1.520	3.500	4.010	4.170	3.270	7.120	22.600	6.740	3.640	1.090	2.730	1.180
16	2.700	3.370	3.100	5.260	3.180	7.310	20.600	6.300	2.940	1.790	2.410	.848
17	2.870	3.320	2.770	6.500	2.600	7.580	18.000	6.440	2.080	1.690	2.520	1.570
18	2.950	2.800	3.450	6.600	2.110	7.380	16.000	6.740	2.690	1.780	1.900	1.770
19	3.080	3.090	3.240	6.520	2.740	8.700	14.000	6.550	2.310	1.690	1.160	1.840
20	2.970	3.460	3.300	5.740	2.880	9.540	12.600	6.660	2.150	1.620	2.110	2.110
21	2.180	3.610	3.420	4.820	2.970	9.080	11.700	7.380	1.840	1.260	2.120	2.060
22	1.500	3.890	3.360	5.230	2.740	9.040	10.300	7.150	1.840	1.160	2.100	1.550
23	2.500	3.000	3.270	5.600	3.800	8.830	11.200	7.340	1.580	1.870	1.960	.937
24	2.390	4.110	2.770	5.630	3.550	9.210	12.400	6.740	1.190	2.350	1.800	1.690
25	2.570	5.630	2.660	5.700	3.360	9.920	13.800	6.930	2.120	2.800	1.610	1.750
26	2.570	7.270	3.060	5.460	3.390	12.000	11.700	10.600	2.270	2.520	1.130	1.530
27	2.500	6.770	2.940	5.290	3.580	13.600	9.960	10.500	2.640	2.280	1.740	1.620
28	1.870	6.440	3.060	4.590	3.670	16.200	8.870	9.120	2.440	1.520	1.700	2.310
29	1.280	5.770	3.200	5.260		16.800	10.000	7.500	2.160	.797	1.790	2.060
30	1.880	5.430	3.600	5.020		20.000	13.100	5.500	1.640	2.230	1.630	1.390
31	1.910		3.200	4.800		26.000		5.670		2.180	1.660	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-NATCHEZ TO GULF
STATION LOCATION MISSISSIPPI RIVER AT
NEW ORLEANS, LOUISIANA 20

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	25	61	11	1	6434	131	51	80	2	12	14	1	1	11	1	5	5	1	12
11	13	61	11	20	6440	116	29	87	1	7	11	1	1	8	1	3	1	1	5
12	11	61	12	18	6440	121	35	86	0	10	11	1	2	7	1	4	2	1	7
2	8	62	2	15	6325	100	48	52	2	11	12	1	1	10	0	5	4	1	13
3	7	62	3	14	6440	71	25	46	1	6	8	1	1	6	0	3	3	0	4
3	30	62	4	6	6440	96	26	70	0	6	10	1	1	8	0	3	2	0	5
4	24	62	5	1	6440	119	54	65	2	18	11	1	1	9	0	5	5	1	12
5	21	62	5	28	6440	95	55	40	4	13	14	1	1	11	1	7	5	1	11
6	20	62	6	27	6440	78	33	45	1	8	11	1	1	9	0	4	3	1	5
7	17	62	7	24	6440	78	32	46	0	7	11	1	1	8	1	3	2	1	8
8	20	62	8	27	6440	78	30	48	0	7	11	1	1	8	1	4	2	1	5

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-NATCHEZ TO GULF
STATION LOCATION MISSISSIPPI RIVER AT
NEW ORLEANS, LOUISIANA 20

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
NO.	DAY	YR.	NO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	NO.	DAY	μμc/g	±	μμc/g	±
10	20	61	10	31	0	2	1	1	1	2	17	7	12	6	29	9						
10	26	61	11	3	-	-	-	-	-	-	9	7	15	8	24	11						
11	2	61	11	16	-	-	-	-	-	-	0	13	18	13	18	18						
11	9	61	11	21	-	-	-	-	-	-	5	7	11	7	16	10						
11	16	61	11	28	-	-	-	-	-	-	22	8	37	9	59	12						
11	22	61	11	30	1	1	1	1	2	1	13	5	23	6	36	8						
11	30	61	12	7	-	-	-	-	-	-	43	9	16	6	59	11						
12	7	61	12	14	-	-	-	-	-	-	64	10	29	8	93	13						
12	14	61	12	22	-	-	-	-	-	-	26	8	28	8	54	11						
12	21	61	1	8	20	9	1	1	21	9	87	11	58	7	145	13						
12	28	61	1	5	-	-	-	-	-	-	46	10	20	7	66	12						
1	11	62	1	19	-	-	-	-	-	-	11	6	23	7	34	9						
1	18	62	1	29	4	3	1	1	5	3	38	8	28	6	66	10						
1	25	62	2	6	-	-	-	-	-	-	38	8	22	7	60	11						
2	1	62	2	13	-	-	-	-	-	-	116	19	34	7	150	20						
2	8	62	2	19	-	-	-	-	-	-	41	10	23	7	64	12						
2	15	62	2	28	-	-	-	-	-	-	42	10	32	7	74	12						
2	22	62	3	8	8	5	0	1	8	5	90	14	31	6	121	15						
3	1	62	3	13	-	-	-	-	-	-	46	10	17	7	63	12						
3	8	62	3	20	-	-	-	-	-	-	98	12	19	7	117	14						
3	15	62	3	29	-	-	-	-	-	-	105	21	30	7	135	22						
3	20	62	4	3	3	2	1	1	4	2	56	7	22	5	78	9						
3	29	62	4	12	-	-	-	-	-	-	80	12	30	7	110	14						
4	5	62	4	20	-	-	-	-	-	-	98	21	19	8	117	22						
4	12	62	4	26	-	-	-	-	-	-	85	19	33	7	118	20						
4	19	62	5	2	4	2	1	2	5	3	50	7	27	6	77	9						
4	26	62	5	25	-	-	-	-	-	-	118	13	55	9	173	16						
5	3	62	6	21	-	-	-	-	-	-	118	14	39	8	157	16						
5	10	62	6	20	-	-	-	-	-	-	18	9	21	9	39	13						
5	17	62	6	22	-	-	-	-	-	-	13	4	29	5	42	6						
5	24	62	6	27	2	1	1	1	3	1	15	8	22	8	37	11						
5	31	62	7	2	-	-	-	-	-	-	28	9	26	8	54	12						
6	7	62	7	6	-	-	-	-	-	-	16	6	24	7	40	9						
6	14	62	7	12	-	-	-	-	-	-	33	18	27	9	60	20						
6	21	62	8	6	3	5	2	2	5	5	49	61	17	16	66	63						
6	28	62	7	24	-	-	-	-	-	-	53	12	37	8	90	14						
7	5	62	9	30	-	-	-	-	-	-	173	63	2	7	175	63						
7	26	62	8	21	0	1	1	2	1	2	11	10	25	12	36	16						
8	2	62	8	23	-	-	-	-	-	-	11	7	22	8	33	11						
8	9	62	8	27	-	-	-	-	-	-	92	15	19	3	111	15						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE LOUISIANA

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN LOWER MISSISSIPPI-NATCHEZ TO GULF

STATION LOCATION MISSISSIPPI RIVER AT
NEW ORLEANS, LOUISIANA 20

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	16	62	9	5	-	-	-	-	-	-	7	6	20	7	27	9						
8	23	62	9	9	0	1	1	2	1	2	5	4	25	6	30	7						
8	28	62	10	25	-	-	-	-	-	-	3	12	17	15	20	19						
9	6	62	10	1	-	-	-	-	-	-	6	13	4	16	10	21						
9	20	62	10	16	1	1	2	2	3	2	0	5	22	8	22	9						
9	27	62	10	22	-	-	-	-	-	-	7	3	22	4	29	5						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE LOUISIANA

MAJOR BASIN SOUTHWEST—LOWER MISSISSIPPI RIVER

MINOR BASIN LOWER MISSISSIPPI-NATCHEZ TO GULF

STATION LOCATION MISSISSIPPI RIVER AT

NEW ORLEANS, LOUISIANA 20

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	300	0	0	20	0	20	0	250	0	110	70	69	1																		
10	18	61	100	20	50	0	0	0	0	50	20	200	70																				
11	1	61	400	20	0	20	0	0	0	210	150	0	20																				
11	15	61	1000	0	60	80	0	80	0	620	170	60	80	71	2	69	1																
12	20	61	800	0	0	20	0	60	0	580	170	60	40	71	2	69	2																
1	3	62	600	0	0	20	0	60	0	450	50	290	290	71	1																		
1	17	62	900	0	0	20	0	20	0	700	120	100	80	71	1																		
1	31	62	700	0	0	40	0	80	0	410	170	40	120	71	1																		
2	14	62	400	0	0	40	0	20	70	180	70	130	250																				
3	15	62	500	0	0	0	0	0	20	210	310	190	150	92	1																		
4	4	62	500	0	0	0	0	170	20	190	150	40	120																				
4	18	62	900	0	0	40	0	40	0	530	250	250	210	69	2	71	1																
5	2	62	1200	0	80	80	0	130	80	760	110	700	130	71	2	69	1																
5	7	62	1000	0	60	80	60	20	20	700	80	1630	270	71	2																		
5	20	62	2300	0	0	230	340	130	0	1310	340	1560	380	71	3	50	2	69	1	92	1												
6	4	62	1300	20	40	170	20	20	0	680	310	310	0	69	1																		
6	18	62	2200	0	0	60	0	870	0	810	410	210	60	57	3	71	3	92	1														
7	2	62	900	0	0	20	40	20	20	270	370	150	150	92	1																		
7	16	62	1100	40	0	150	20	80	0	750	250	0	80	68	2																		
8	6	62	1100	0	0	80	100	0	0	700	210	40	0	71	2	69	1	68	1														
8	20	62	500	0	40	60	0	60	0	80	250	120	120																				
9	4	62	900	0	40	100	20	40	0	620	40	120	0	67	2	69	1																
9	17	62	700	0	0	40	0	40	0	560	80	80	0	69	1	67	1																

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE LOUISIANA

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN LOWER MISSISSIPPI-NATCHEZ TO GULF

STATION LOCATION MISSISSIPPI RIVER AT

NEW ORLEANS, LOUISIANA 020

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																		NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														ROTIFERS											CRUSTACEA									
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	4	61	58	37	56	35	26	5	83	4	19	20	0	0											0							0	0
10	18	61	56	21	92	20	58	17	26	13	29	0	0	0											0							0	0
11	1	61	56	40	58	22	92	16	83	9	13	0	0	1											0							0	0
11	15	61	92	23	83	20	56	16	58	12	29	0	0	1											0							0	0
12	20	61	56	29	83	29	92	17	47	4	21	0	0	0											0							0	0
1	3	62	56	34	92	25	80	19	26	4	18	0	0	0											0							0	0
1	17	62	80	25	56	20	92	12	83	8	55	20	0	0											1							0	0
1	31	62	56	19	92	12	89	12	62	6	51	0	0	0											0							0	0
2	14	62										20	0	0											0							0	0
3	15	62	80	17	92	14	62	7	56	6	56	60	0	0											0							0	0
4	4	62	62	30	92	30	83	8	71	6	26	40	0	1											1							0	0
4	18	62	62	21	92	13	83	9	26	5	52	0	0	0											0							0	0
5	2	62	62	36	92	21	56	10	80	7	26	0	0	0											0							0	0
5	7	62	80	26	56	17	92	13	82	12	32	0	0	3											1							0	0
5	20	62	80	28	56	17	92	14	58	12	29	80	0	3											1							0	0
6	4	62	56	27	80	26	58	15	92	4	28	20	0	1											1							0	0
6	18	62	92	26	80	13	83	13	71	10	38	20	0	0											0							0	0
7	2	62	92	28	80	15	71	11	56	7	39	0	0	0											0							0	0
7	16	62	26	56	56	12	58	10	20	5	17	0	0	1											0							0	0
8	6	62	20	27	58	17	56	16	26	13	27	0	0	6											0							0	0
8	20	62	58	29	20	16	56	15	26	12	28	0	0	3											0							0	0
9	4	62	20	48	58	20	56	18	57	5	9	0	0	17	17	1	11	1							0							3	0
9	17	62	20	37	58	25	56	22	89	4	12	0	0	0											0							0	0

687-228 O-63—26

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-NATCHEZ TO GULF
STATION LOCATION MISSISSIPPI RIVER AT
NEW ORLEANS, LOUISIANA 20

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	5	61	23.3	5.6	7.9	-	26	2.0	5.4	1.0	16	96	115	25	228	40	.2	194	830
10	12	61	21.7	7.2	8.0	.4	23	1.5	5.4	.5	22	104	137	20	210	44	.2	223	-
10	19	61	21.1	7.2	8.0	.3	17	1.2	4.4	.7	23	101	128	15	170	42	.2	210	2400
10	26	61	20.0	7.2	8.2	.7	19	.7	4.4	.7	23	124	161	10	198	45	.2	196	2200
11	2	61	18.9	7.5	8.0	-	19	1.2	4.4	.8	26	136	183	20	153	65	.1	273	1100
11	9	61	16.1	8.5	8.0	.9	21	1.3	4.4	.8	24	130	167	20	145	51	.1	290	-
11	16	61	15.6	8.5	7.9	.8	24	1.3	4.4	.7	38	135	180	15	218	55	.2	285	1200
11	22	61	13.9	7.8	7.8	1.2	30	1.7	5.4	.8	21	109	141	25	318	41	.1	241	200
11	30	61	12.2	8.7	7.6	.7	23	1.6	5.2	.8	32	111	157	20	185	49	.2	287	2000
12	7	61	10.0	7.0	7.8	-	30	1.6	6.2	.8	22	92	130	30	395	37	.1	211	1800
12	14	61	11.1	9.7	7.7	1.4	22	1.6	5.2	.6	27	99	141	30	158	41	.2	237	20000
12	21	61	10.0	9.9	7.6	1.6	28	1.4	5.2	.8	24	89	126	35	370	48	.2	209	2600
12	28	61	5.6	10.1	7.4	1.3	23	.6	4.3	.8	21	76	104	35	185	33	.2	176	600
1	4	62	7.2	11.0	7.7	1.9	18	1.2	5.0	1.0	21	77	109	30	178	32	.2	193	1400
1	11	62	6.1	11.4	7.7	1.7	27	1.2	5.8	.9	17	80	111	20	158	35	.1	160	500
1	18	62	4.4	11.5	7.5	2.1	23	1.2	6.0	.9	24	93	122	30	163	39	.1	216	5300
1	25	62	4.4	12.6	7.9	2.9	22	1.2	5.2	.9	21	87	115	30	170	38	.1	212	6000
2	1	62	4.4	11.2	7.4	1.8	23	1.2	6.2	.7	17	70	98	35	198	36	.1	175	1000
2	8	62	5.6	10.9	7.5	3.2	25	1.3	4.7	.9	16	76	100	35	288	33	.1	181	1300
2	15	62	7.2	8.7	7.7	1.4	16	1.3	4.7	.8	19	80	111	20	178	37	.1	201	-
2	22	62	8.3	9.4	7.5	1.4	23	1.3	5.3	.8	18	81	120	20	185	30	.1	191	800
3	1	62	10.0	8.2	7.8	1.1	20	1.3	4.7	.8	20	92	126	25	163	45	-	200	200
3	9	62	7.8	8.1	7.8	.8	22	1.1	5.5	1.2	17	79	107	25	230	37	.1	222	-
3	15	62	7.8	8.9	7.7	2.5	25	1.3	5.5	.7	13	69	96	30	315	37	.1	140	12
3	22	62	8.9	7.9	7.5	.7	17	1.3	5.3	.9	12	67	96	25	198	37	.1	144	600
3	29	62	10.0	8.3	7.5	.5	17	1.4	5.2	1.0	14	77	109	15	145	34	.1	169	200
4	5	62	11.1	8.0	7.6	2.9	18	1.1	5.5	.3	17	80	113	15	253	39	.1	-	2700
4	12	62	11.7	7.0	7.2	.1	23	1.2	4.8	.4	15	-	115	20	460	39	.1	199	*200
4	19	62	13.3	7.0	7.6	.6	25	1.2	4.0	.4	14	87	115	15	198	37	.1	171	-
4	26	62	14.4	7.5	7.6	2.0	16	1.0	4.0	.2	14	84	120	20	158	37	.1	217	-
5	3	62	16.7	7.0	7.7	1.5	19	1.5	4.0	.3	14	83	115	30	190	32	.1	185	1200
5	10	62	18.9	5.7	7.7	1.6	19	1.5	4.5	.3	15	91	120	35	178	34	.2	210	-
5	17	62	22.2	6.5	7.5	2.2	19	1.2	5.4	.3	17	100	135	30	103	41	.1	204	5800
5	24	62	24.4	2.6	7.6	1.2	14	1.2	4.0	.1	18	111	148	20	78	48	.1	-	200
5	31	62	25.0	5.8	7.9	.3	18	.6	4.5	.3	20	121	161	20	128	53	.1	285	-
6	7	62	25.7	5.5	7.9	1.3	13	.9	4.2	.4	21	132	176	30	85	55	.1	284	400
6	14	62	24.4	4.7	7.8	1.2	16	1.3	4.6	.5	23	132	183	15	145	68	.1	342	-
6	21	62	26.1	4.7	7.8	.2	34	1.3	4.6	.5	24	113	152	15	475	48	.2	272	2000
6	28	62	26.1	5.3	7.7	.2	23	1.3	5.4	.4	27	113	150	30	370	52	.2	252	3000

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-NATCHEZ TO GULF
STATION LOCATION MISSISSIPPI RIVER AT
NEW ORLEANS, LOUISIANA 20

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	5	62	26.7	6.1	7.8	2.2	24	1.4	5.3	.4	20	119	154	20	325	45	.1	311	7000
7	12	62	27.8	5.3	7.6	.8	15	1.4	5.1	.4	27	123	159	15	115	45	.1	252	18000
7	19	62	28.9	5.6	7.9	.2	16	1.4	5.1	.5	30	137	170	30	133	62	.1	274	800
7	26	62	29.4	5.6	7.9	1.4	22	1.0	4.2	.5	38	124	167	20	73	78	.1	305	200
8	2	62	29.4	5.2	7.7	.2	13	1.2	4.5	.8	23	124	167	15	108	67	.1	267	-
8	9	62	28.9	5.7	8.0	.2	16	1.4	4.5	.4	21	128	163	20	120	65	.1	262	800
8	16	62	28.3	5.5	7.9	.1	16	1.0	3.6	.7	19	134	167	20	145	55	.2	290	1800
8	23	62	28.3	7.1	7.9	.5	13	1.0	3.4	.4	23	142	176	15	73	40	.2	253	200
8	29	62	26.7	6.1	7.7	.6	13	1.1	3.4	.8	36	148	185	15	37	62	.2	316	-
9	6	62	26.1	5.9	8.0	.6	11	1.0	3.0	.6	30	154	187	20	27	61	.2	290	9200
9	13	62	25.6	6.9	8.0	1.0	8	1.0	3.2	.7	30	161	197	15	24	62	.2	316	-
9	20	62	25.0	6.9	8.0	.6	18	1.1	3.2	.6	26	146	184	15	36	64	.5	280	23000
9	27	62	23.3	6.3	7.8	.7	13	1.1	3.8	.6	26	135	178	25	58	85	.2	311	2000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Red River Landing, Louisiana
Operated by U.S. Geological Survey

STATE Louisiana
MAJOR BASIN Southwest-Lower Mississippi River
MINOR BASIN Lower Mississippi-Natchez to Gulf
STATION LOCATION Mississippi River at
New Orleans, Louisiana

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	363.000	224.000	581.000	805.000	748.000	645.000	1051.000	997.000	297.000	324.000	253.000	152.000
2	351.000	216.000	571.000	796.000	765.000	665.000	1051.000	992.000	296.000	315.000	254.000	152.000
3	349.000	211.000	558.000	772.000	781.000	697.000	1054.000	986.000	300.000	304.000	259.000	153.000
4	346.000	209.000	536.000	715.000	800.000	743.000	1054.000	982.000	300.000	293.000	262.000	152.000
5	353.000	206.000	518.000	673.000	812.000	773.000	1057.000	964.000	321.000	284.000	261.000	152.000
6	363.000	206.000	496.000	638.000	825.000	800.000	1069.000	934.000	326.000	278.000	254.000	156.000
7	358.000	203.000	472.000	603.000	840.000	821.000	1072.000	902.000	336.000	271.000	248.000	160.000
8	342.000	203.000	451.000	568.000	850.000	840.000	1072.000	855.000	346.000	263.000	248.000	166.000
9	327.000	211.000	445.000	537.000	859.000	862.000	1074.000	803.000	362.000	257.000	236.000	172.000
10	310.000	240.000	442.000	501.000	863.000	903.000	1074.000	766.000	379.000	255.000	224.000	177.000
11	298.000	281.000	442.000	474.000	863.000	939.000	1074.000	742.000	394.000	253.000	216.000	184.000
12	294.000	331.000	448.000	456.000	863.000	954.000	1079.000	719.000	404.000	253.000	208.000	187.000
13	291.000	378.000	475.000	461.000	863.000	975.000	1081.000	694.000	409.000	259.000	206.000	194.000
14	289.000	422.000	457.000	490.000	821.000	975.000	1081.000	663.000	411.000	267.000	211.000	200.000
15	284.000	433.000	472.000	516.000	812.000	992.000	1081.000	628.000	417.000	274.000	211.000	209.000
16	276.000	436.000	493.000	550.000	802.000	1012.000	1078.000	590.000	426.000	274.000	210.000	219.000
17	260.000	430.000	527.000	564.000	794.000	1034.000	1060.000	551.000	434.000	265.000	205.000	225.000
18	250.000	413.000	587.000	587.000	783.000	1043.000	1049.000	519.000	443.000	264.000	199.000	227.000
19	246.000	386.000	614.000	613.000	769.000	1045.000	1049.000	496.000	447.000	264.000	193.000	231.000
20	244.000	368.000	641.000	619.000	739.000	1045.000	1040.000	478.000	443.000	261.000	186.000	236.000
21	250.000	358.000	654.000	621.000	719.000	1005.000	1033.000	468.000	441.000	258.000	178.000	242.000
22	258.000	351.000	671.000	623.000	702.000	1009.000	1033.000	448.000	438.000	258.000	171.000	244.000
23	264.000	349.000	692.000	625.000	685.000	1020.000	1026.000	423.000	441.000	258.000	167.000	242.000
24	267.000	368.000	709.000	625.000	670.000	1033.000	1012.000	404.000	434.000	261.000	163.000	238.000
25	270.000	386.000	726.000	625.000	648.000	1039.000	1012.000	387.000	424.000	265.000	160.000	244.000
26	269.000	424.000	744.000	628.000	639.000	1040.000	1005.000	374.000	407.000	265.000	159.000	247.000
27	265.000	484.000	758.000	653.000	630.000	1042.000	1005.000	358.000	377.000	269.000	158.000	246.000
28	254.000	530.000	765.000	673.000	630.000	1042.000	1019.000	342.000	355.000	265.000	156.000	240.000
29	247.000	555.000	776.000	690.000		1042.000	1019.000	325.000	339.000	261.000	154.000	231.000
30	236.000	574.000	782.000	710.000		1042.000	1005.000	313.000	332.000	258.000	152.000	224.000
31	229.000		790.000	728.000		1049.000		304.000		253.000	152.000	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MISSISSIPPI
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-YAZOO RIVERS
STATION LOCATION MISSISSIPPI RIVER AT
VICKSBURG, MISSISSIPPI 21

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	13	61	10	23	6500	62	10	52	0	2	5	1	1	3	0	1	1	0	1
11	10	61	11	20	6500	*	8	*	0	1	5	1	1	3	0	1	0	0	1
12	11	61	12	21	6500#	64	9	55	0	1	5	1	1	3	0	1	1	0	1
1	17	62	1	26	5850	85	25	60	1	7	8	1	1	6	0	3	2	1	3
2	12	62	2	23	7150#	83	21	62	1	5	7	1	1	5	0	3	2	0	3
3	9	62	3	19	6500#	80	20	60	0	4	7	1	1	4	1	3	2	0	4
4	5	62	4	16	5900#	105	37	68	2	11	12	1	1	9	1	4	3	1	4
5	10	62	5	21	6600#	82	36	46	2	10	8	1	1	6	0	4	4	0	8
6	6	62	6	15	5400#	61	27	34	2	7	6	1	1	4	0	3	2	1	6
7	9	62	7	18	5400#	63	26	37	0	8	7	1	1	5	0	3	2	0	6
8	6	62	8	15	5400#	62	20	42	1	7	5	1	1	3	0	2	1	0	4
9	10	62	9	19	5400#	66	16	50	0	5	6	1	0	4	1	2	1	0	2

ESTIMATED

* LABORATORY ACCIDENT

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	MISSISSIPPI
MAJOR BASIN	SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN	LOWER MISSISSIPPI-YAZOO RIVERS
STATION LOCATION	MISSISSIPPI RIVER AT VICKSBURG, MISSISSIPPI

21

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA								DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL						ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±			MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	13	-	-	-	-	-	-	20	11	6	7	26	13								
10	9	61	10	24	-	-	-	-	-	-	56	11	11	7	67	13								
10	16	61	10	27	0	1	1	1	1	1	32	8	46	7	78	11								
10	23	61	11	1	7	5	1	1	8	5	28	9	10	6	38	11								
10	30	61	11	7	4	4	1	1	5	4	33	8	13	6	46	10								
11	6	61	11	17	2	2	1	1	3	2	24	6	28	6	52	8								
11	13	61	11	24	3	3	1	1	4	3	112	10	30	6	142	12								
11	20	61	11	30	3	4	1	1	4	4	75	10	34	6	109	12								
11	27	61	12	7	2	3	3	2	5	4	76	11	44	7	120	13								
12	4	61	12	12	1	1	0	1	1	1	46	8	39	7	85	11								
12	11	61	12	19	2	2	1	1	3	2	89	9	40	6	129	11								
12	18	61	12	28	5	3	0	1	5	3	81	8	26	5	107	9								
12	26	61	1	11	3	2	0	1	3	2	36	5	31	5	67	8								
1	2	62	1	11	1	1	0	0	1	1	53	8	23	6	76	10								
1	8	62	1	19	1	1	0	1	1	1	134	8	62	5	196	9								
1	15	62	1	25	5	3	0	1	5	3	151	10	54	6	205	12								
1	22	62	2	6	7	4	0	1	7	4	170	11	43	5	213	12								
1	29	62	2	12	1	1	0	1	1	1	83	7	46	5	129	9								
2	5	62	2	15	3	3	0	1	3	3	94	9	35	5	129	10								
2	12	62	2	21	1	1	0	1	1	1	55	6	42	6	97	8								
2	19	62	3	5	3	2	0	1	3	2	67	7	28	5	95	9								
2	26	62	3	9	2	1	1	1	3	1	57	7	36	6	93	9								
3	5	62	3	16	2	3	0	1	2	3	113	10	35	5	148	11								
3	12	62	3	26	3	3	1	1	4	3	88	9	36	5	124	10								
3	19	62	3	29	4	3	0	2	4	3	71	23	26	19	97	30								
3	26	62	4	5	5	2	0	1	5	2	68	11	31	5	99	12								
4	2	62	4	13	2	2	0	2	2	3	75	8	33	6	108	10								
4	9	62	4	24	4	4	0	1	4	4	75	9	31	5	106	10								
4	16	62	4	30	2	1	1	1	3	1	38	6	29	6	67	8								
4	23	62	5	28	0	1	0	1	0	1	27	5	32	6	59	7								
4	30	62	6	5	1	1	0	1	1	1	42	7	38	7	80	10								
5	7	62	6	13	1	1	0	1	1	1	46	9	33	8	79	12								
5	14	62	6	19	6	3	3	1	9	3	37	9	30	7	67	11								
5	21	62	6	28	1	1	0	1	1	1	135	6	19	7	154	9								
5	28	62	7	2	1	1	1	1	2	1	21	8	28	7	49	11								
6	4	62	7	5	4	3	2	2	6	4	37	11	28	10	65	15								
6	11	62	7	9	10	7	1	1	11	7	88	40	35	8	123	41								
6	18	62	7	18	0	6	0	1	0	6	98	63	35	8	133	64								
6	25	62	7	24	5	5	0	1	5	5	69	58	33	33	102	67								
7	2	62	7	24	3	3	0	1	3	3	43	10	22	7	65	12								
7	9	62	8	17	-	-	-	-	-	-	13	8	26	8	39	11								

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MISSISSIPPI
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-YAZOO RIVERS
STATION LOCATION MISSISSIPPI RIVER AT
VICKSBURG, MISSISSIPPI 21

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	16	62	8	7	2	2	1	1	3	2	27	9	29	8	56	12						
7	23	62	8	24	2	1	1	2	3	2	11	8	14	9	25	12						
7	30	62	8	22	1	1	0	1	1	1	14	8	19	7	33	11						
8	6	62	8	28	6	3	1	1	7	3	40	10	30	7	70	12						
8	13	62	10	9	3	3	1	1	4	3	38	36	21	9	59	37						
8	20	62	9	5	2	2	1	1	3	2	23	14	22	8	45	16						
8	27	62	9	17	5	4	2	2	7	4	35	38	35	16	70	41						
9	4	62	9	21	2	1	3	3	5	3	21	7	37	14	58	16						
9	10	62	9	21	1	1	1	1	2	1	19	8	21	9	40	12						
9	17	62	10	15	0	1	1	1	1	1	11	13	22	8	33	15						
9	24	62	10	16	2	2	0	1	2	2	30	17	22	9	52	19						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	MISSISSIPPI
MAJOR BASIN	SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN	LOWER MISSISSIPPI-YAZOO RIVERS
STATION LOCATION	MISSISSIPPI RIVER AT VICKSBURG, MISSISSIPPI 21

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	600	0	20	70	0	40	0	360	70	130	70	69	1																		
10	16	61	1400	0	40	230	0	170	0	640	290	250	150	92	1	69	1	71	1														
11	6	61	1600	0	60	150	0	150	0	810	390	390	190																				
11	20	61	700	0	20	60	0	40	0	440	100	40	60	71	1																		
12	4	61	500	0	0	0	0	70	0	360	90	270	90	71	1																		
12	18	61	400	0	0	20	0	0	0	270	100	0	120	69	2																		
1	2	62	800	0	0	50	0	0	20	520	200	70	70	69	1	71	1																
1	15	62	1000	0	0	0	0	20	40	770	120	60	190	71	3																		
2	5	62	400	0	0	0	0	0	0	200	230	70	50																				
2	19	62	200	0	0	0	0	20	50	70	90	110	160																				
3	5	62	200	0	0	0	0	40	20	90	20	40	40																				
3	19	62	500	0	0	20	0	120	20	170	170	120	120																				
4	2	62	600	20	0	20	0	20	20	290	250	80	60	71	1	92	1																
4	16	62	900	0	0	80	0	290	80	210	250	80	120	51	1																		
5	7	62	1300	0	0	170	80	40	0	760	210	1100	80	71	2	69	1																
5	21	62	3900	0	20	330	660	660	40	1550	620	580	60	71	3	50	3	69	3	57	2	92	1	68	1								
6	4	62	2100	40	20	150	20	80	0	1430	390	230	40	69	3	71	2	92	1														
6	18	62	1400	20	0	40	0	60	0	660	580	100	0	71	2	69	1	92	1														
7	2	62	1000	0	0	0	20	20	20	480	440	80	100	71	1	92	1																
7	16	62	1700	0	0	120	20	80	0	950	540	170	40	68	3	69	1																
8	6	62	500	0	0	60	0	20	40	210	170	170	80																				
8	20	62	500	0	0	170	0	0	60	210	80	170	40																				
9	4	62	6500	2940	0	250	60	250	0	2260	700	250	120	2	5	67	4	69	2	68	2	92	1	38	1	88	1						
9	17	62	2800	0	0	270	0	140	0	1900	460	500	210	69	4	71	2	68	1	87	1	88	1										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MISSISSIPPI

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN LOWER MISSISSIPPI-YAZOO RIVERS

STATION LOCATION MISSISSIPPI RIVER AT

VICKSBURG, MISSISSIPPI 021

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	56	68	53	4	92	4	26	3	21	20	0	0											0							0	0
10	16	61	56	64	58	15	92	7	83	2	12	0	0	0											0							0	0
11	6	61	56	46	58	39	92	4	5	3	8	0	0	1											0							0	0
11	20	61	83	41	92	21	56	19	47	4	15	0	0	0											0							0	0
12	4	61	56	34	83	30	80	13	92	7	16	20	0	1											0							0	0
12	18	61	56	44	83	15	92	4	5	11	16	0	0	0											0							0	0
1	2	62	56	36	80	12	83	7	89	7	38	200	0	0											0							0	0
1	15	62	56	29	80	9	83	9	89	9	44	0	0	0											0							0	0
2	5	62										0	0	0											0							0	0
2	19	62										70	0	1											0							0	0
3	5	62										0	0	0											0							0	0
3	19	62	56	21	92	18	83	8	26	6	47	0	10	0											5							0	0
4	2	62	62	40	92	26	56	13	80	2	19	0	0	2											1							0	0
4	16	62	62	41	92	17	56	6	80	5	31	20	10	9											5	50	1					0	0
5	7	62	56	28	80	19	62	8	82	8	37	0	0	1											5	76	1					0	0
5	21	62	80	30	56	27	58	12	92	7	24	20	0	75	11	4	17	1	2	1	21	1			10	50	1					0	0
6	4	62	56	38	80	30	58	16	89	6	10	0	0	0											2							0	0
6	18	62	92	21	80	16	71	9	56	8	46	0	0	0											4							0	0
7	2	62	26	18	80	18	83	13	56	10	41	0	0	1											0							0	0
7	16	62	26	71	20	12	56	4	80	3	10	0	0	3											0							0	0
8	6	62	58	23	56	14	26	13	75	8	42	0	0	0											0							0	0
8	20	62	56	29	58	21	26	9	20	9	32	0	0	0											0							0	0
9	4	62	20	49	26	23	56	13	58	13	2	0	0	2											0							0	0
9	17	62	58	27	82	21	26	20	56	9	23	0	0	16	17	1									0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MISSISSIPPI
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-YAZOO RIVERS
STATION LOCATION MISSISSIPPI RIVER AT
VICKSBURG, MISSISSIPPI 21

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	23.0	-	8.0	-	-	-	-	-	-	80	130	0	400	-	-	-	-
10	9	61	21.0	-	7.8	-	-	-	-	-	-	100	110	0	500	-	-	-	-
10	16	61	20.0	-	7.9	-	23	-	-	-	-	96	124	-	300	-	-	-	-
10	23	61	19.0	-	8.0	-	-	-	-	-	-	120	160	-	700	-	-	-	-
10	30	61	18.0	-	8.0	-	-	-	-	-	-	114	156	-	550	-	-	-	-
11	6	61	18.0	-	8.0	-	-	-	-	-	-	114	162	-	275	-	-	-	-
11	13	61	-	-	7.8	-	-	-	-	-	-	130	166	-	1000	-	-	-	-
11	20	61	-	-	7.7	-	25	-	-	-	-	80	100	-	450	-	-	-	-
11	27	61	-	-	8.0	-	-	-	-	-	-	108	146	-	500	-	-	-	-
12	4	61	-	-	7.6	-	-	-	-	-	-	78	108	-	340	-	-	-	-
12	11	61	12.0	-	7.6	-	-	-	-	-	-	68	102	-	250	-	-	-	-
12	18	61	10.0	-	7.4	-	20	-	-	-	-	48	82	-	-	-	-	-	-
12	26	61	-	-	7.4	-	-	-	-	-	-	44	90	-	230	-	-	-	-
1	2	62	6.0	-	7.2	-	-	-	-	-	18	36	66	20	130	16	.1	92	-
1	8	62	7.0	-	7.2	-	-	-	-	-	8	40	60	10	290	16	.1	-	-
1	15	62	4.0	-	7.3	-	-	-	-	-	9	44	84	-	250	21	.0	-	-
1	22	62	6.0	-	7.4	-	-	-	-	-	-	50	86	-	380	-	-	89	-
1	29	62	7.0	-	7.6	-	-	-	-	-	8	44	70	20	350	9	.0	-	-
2	5	62	8.0	-	7.4	-	-	-	-	-	-	52	92	20	300	-	-	-	-
2	12	62	9.0	-	7.4	-	-	-	-	-	-	60	96	-	200	-	-	-	-
2	19	62	10.0	-	7.4	-	-	-	-	-	12	72	106	20	240	39	-	-	-
2	26	62	11.0	-	7.7	-	-	-	-	-	15	86	112	5	200	35	.0	-	-
3	5	62	9.0	-	7.6	-	-	-	-	-	-	66	96	-	280	-	-	-	-
3	12	62	9.0	-	7.6	-	-	-	-	-	-	50	84	-	280	-	-	-	-
3	19	62	9.0	-	7.5	-	8	-	-	-	-	60	52	-	200	-	-	-	-
3	26	62	11.0	-	7.6	-	-	-	-	-	24	64	104	10	150	40	-	-	-
4	2	62	12.0	-	7.6	-	-	-	-	-	16	72	106	10	-	41	.0	-	-
4	9	62	13.0	-	7.7	-	-	-	-	-	11	80	106	5	180	42	-	-	-
4	16	62	14.0	-	7.7	-	-	-	-	-	11	80	106	20	160	38	-	239	-
4	23	62	15.0	-	7.3	-	15	-	-	-	12	36	100	5	120	38	-	167	-
4	30	62	19.0	-	7.7	-	-	-	-	-	9	88	106	5	100	34	.0	-	-
5	7	62	21.0	-	7.4	-	-	-	-	-	-	74	88	-	100	-	-	-	-
5	14	62	22.0	-	7.7	-	-	-	-	-	10	80	100	15	170	40	.0	-	-
5	21	62	25.0	-	7.7	-	28	-	-	-	10	100	110	10	160	39	.1	-	-
5	28	62	26.0	-	7.6	-	-	-	-	-	11	96	108	10	220	39	.1	-	-
6	4	62	26.0	-	7.4	-	-	-	-	-	25	130	150	-	280	58	-	-	-
6	11	62	27.0	-	7.9	-	-	-	-	-	-	120	140	-	700	-	-	-	-
6	15	62	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-
6	18	62	27.0	-	7.8	-	-	-	-	-	-	120	125	-	700	-	-	-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MISSISSIPPI
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI
MINOR BASIN LOWER MISSISSIPPI-YAZOO RIVER
STATION LOCATION MISSISSIPPI RIVER AT
VICKSBURG, MISSISSIPPI 21

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	25	62	27.0	-	7.8	-	-	-	-	-	-	110	126	-	600	-	-	-	-
7	2	62	28.0	-	7.6	-	-	-	-	-	-	110	120	-	350	-	-	-	-
7	9	62	30.0	-	7.7	-	-	-	-	-	-	100	130	-	300	-	-	-	-
7	16	62	30.0	-	7.9	-	22	-	-	-	25	104	140	5	250	56	.0	-	-
7	23	62	31.0	-	8.1	-	-	-	-	-	-	116	148	-	230	-	-	-	-
7	30	62	30.0	-	8.0	-	-	-	-	-	17	112	140	5	230	56	.0	-	-
8	6	62	29.0	-	7.8	-	-	-	-	-	-	100	130	5	330	53	-	220	-
8	13	62	30.0	-	7.9	-	16	-	-	-	14	130	130	10	260	44	.0	-	-
8	20	62	29.0	-	8.0	-	-	-	-	-	-	126	112	-	280	-	-	-	-
8	27	62	29.0	-	8.1	-	-	-	-	-	16	136	156	5	270	100	-	356	-
9	4	62	29.0	-	8.2	-	-	-	-	-	-	130	154	-	160	-	-	-	-
9	10	62	27.0	-	8.3	-	-	-	-	-	-	134	154	-	110	-	-	-	-
9	17	62	26.0	-	8.1	-	-	-	-	-	-	120	140	-	200	-	-	-	-
9	24	62	24.0	-	8.1	-	-	-	-	-	-	108	126	-	250	-	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Vicksburg, Mississippi
Operated by U.S. Geological Survey

STATE	Mississippi
MAJOR BASIN	Southwest-Lower Mississippi River
MINOR BASIN	Lower Mississippi-Yazoo Rivers
STATION LOCATION	Mississippi River at Vicksburg, Mississippi

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	470.000	286.000	694.000	906.000	950.000	838.000	1418.000	1225.000	393.000	420.000	406.000	223.000
2	461.000	282.000	668.000	884.000	978.000	870.000	1434.000	1192.000	403.000	412.000	413.000	226.000
3	467.000	276.000	636.000	865.000	1014.000	926.000	1436.000	1158.000	416.000	404.000	408.000	226.000
4	473.000	269.000	601.000	840.000	1046.000	994.000	1430.000	1128.000	428.000	397.000	396.000	224.000
5	470.000	265.000	577.000	800.000	1076.000	1055.000	1414.000	1088.000	435.000	388.000	384.000	227.000
6	460.000	261.000	559.000	740.000	1093.000	1080.000	1408.000	1042.000	444.000	382.000	373.000	232.000
7	439.000	269.000	542.000	680.000	1107.000	1100.000	1410.000	990.000	460.000	370.000	360.000	238.000
8	419.000	294.000	525.000	632.000	1116.000	1175.000	1414.000	950.000	508.000	356.000	348.000	243.000
9	404.000	364.000	513.000	604.000	1122.000	1232.000	1420.000	900.000	545.000	340.000	336.000	249.000
10	397.000	441.000	504.000	578.000	1124.000	1268.000	1421.000	858.000	560.000	332.000	324.000	254.000
11	393.000	510.000	490.000	560.000	1118.000	1296.000	1422.000	822.000	566.000	350.000	315.000	258.000
12	394.000	561.000	488.000	566.000	1108.000	1318.000	1418.000	788.000	562.000	374.000	304.000	264.000
13	389.000	599.000	498.000	588.000	1094.000	1338.000	1412.000	756.000	545.000	390.000	298.000	270.000
14	377.000	611.000	520.000	618.000	1074.000	1350.000	1398.000	730.000	570.000	396.000	286.000	274.000
15	360.000	592.000	551.000	636.000	1052.000	1358.000	1380.000	696.000	594.000	392.000	286.000	279.000
16	340.000	565.000	587.000	653.000	1027.000	1365.000	1368.000	660.000	610.000	386.000	300.000	280.000
17	327.000	535.000	630.000	667.000	1000.000	1372.000	1356.000	615.000	622.000	380.000	293.000	281.000
18	311.000	512.000	678.000	682.000	972.000	1378.000	1347.000	592.000	628.000	376.000	280.000	288.000
19	322.000	489.000	712.000	696.000	942.000	1386.000	1338.000	585.000	626.000	372.000	264.000	292.000
20	336.000	468.000	734.000	708.000	920.000	1395.000	1332.000	576.000	622.000	367.000	254.000	314.000
21	342.000	456.000	750.000	724.000	894.000	1402.000	1326.000	570.000	610.000	364.000	247.000	314.000
22	354.000	452.000	766.000	734.000	868.000	1407.000	1322.000	558.000	594.000	370.000	241.000	312.000
23	365.000	468.000	794.000	736.000	840.000	1412.000	1316.000	540.000	580.000	384.000	238.000	314.000
24	367.000	503.000	821.000	736.000	820.000	1411.000	1312.000	510.000	562.000	396.000	234.000	322.000
25	361.000	561.000	847.000	738.000	810.000	1400.000	1307.000	480.000	542.000	407.000	230.000	330.000
26	348.000	633.000	868.000	760.000	808.000	1375.000	1301.000	458.000	514.000	406.000	227.000	326.000
27	333.000	685.000	891.000	792.000	808.000	1362.000	1296.000	442.000	486.000	400.000	223.000	322.000
28	317.000	718.000	901.000	825.000	818.000	1358.000	1286.000	428.000	462.000	390.000	220.000	316.000
29	305.000	731.000	914.000	865.000		1358.000	1278.000	412.000	445.000	380.000	218.000	304.000
30	297.000	713.000	919.000	896.000		1375.000	1252.000	394.000	432.000	372.000	217.000	296.000
31	292.000		923.000	924.000		1400.000		390.000		374.000	220.000	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-YAZOO RIVERS
STATION LOCATION MISSISSIPPI RIVER AT
DELTA, LOUISIANA 54

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	11	61	10	25	-	-	-	-	-	-	26	10	17	7	43	12						
10	24	61	11	6	-	-	-	-	-	-	21	18	18	12	39	22						
11	16	61	11	28	-	-	-	-	-	-	79	9	40	6	119	11						
11	29	61	12	4	4	2	1	1	5	2	36	7	16	5	52	9						
12	12	61	12	22	-	-	-	-	-	-	148	11	29	8	177	14						
12	28	61	1	10	3	1	1	1	4	1	21	6	26	5	47	8						
1	15	62	1	24	4	3	1	1	5	3	63	10	32	8	95	13						
1	30	62	2	13	-	-	-	-	-	-	118	12	38	7	156	14						
2	13	62	2	23	2	2	1	1	3	2	50	8	31	6	81	10						
2	27	62	3	12	-	-	-	-	-	-	57	11	27	8	84	14						
3	12	62	3	22	2	3	1	1	3	3	88	9	34	5	122	10						
3	27	62	4	9	-	-	-	-	-	-	67	10	33	7	100	12						
4	12	62	4	27	3	3	1	1	4	3	69	13	38	6	107	14						
4	24	62	5	28	-	-	-	-	-	-	69	10	19	8	88	13						
5	9	62	6	14	2	1	1	1	3	1	21	7	29	7	50	10						
5	22	62	6	28	-	-	-	-	-	-	27	10	32	9	59	13						
6	5	62	7	5	0	1	2	2	2	2	15	12	31	8	46	14						
6	19	62	7	17	-	-	-	-	-	-	92	63	19	8	111	64						
7	11	62	8	13	3	3	2	1	5	3	30	6	30	6	60	10						
7	24	62	8	20	-	-	-	-	-	-	32	4	26	4	58	6						
8	8	62	10	1	21	11	2	2	23	11	43	62	30	8	73	63						
8	27	62	9	30	-	-	-	-	-	-	54	15	15	9	69	17						
9	5	62	9	20	0	1	1	2	1	2	4	12	12	16	16	20						
9	19	62	10	15	-	-	-	-	-	-	25	14	33	9	58	17						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE LOUISIANA
MAJOR BASIN SOUTHWEST–LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-YAZOO RIVERS
STATION LOCATION MISSISSIPPI RIVER AT
DELTA, LOUISIANA 54

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	11	61	800	20	0	290	40	0	0	290	150	100	120																				
10	24	61	500	0	40	60	0	40	0	250	150	40	20																				
11	16	61	700	0	40	20	0	20	0	520	130	60	0																				
11	29	61	800	0	60	20	0	0	0	500	210	60	120																				
12	12	61	1600	0	0	60	0	40	0	1180	270	100	190	69	3	71	2	92	1														
12	28	61	1400	20	0	90	0	20	0	830	410	270	90	69	2	71	1																
1	15	62	1800	0	0	60	0	150	0	1430	190	80	120	71	4																		
1	30	62	700	0	0	50	0	70	0	180	380	50	50																				
2	13	62	400	0	0	50	0	0	0	170	230	20	20																				
2	27	62	1100	0	0	0	0	290	0	480	290	100	60	71	2	51	1																
3	12	62	400	0	0	20	0	0	0	250	150	150	310																				
3	27	62	400	0	0	0	0	80	0	150	150	80	20																				
4	10	62	400	0	0	40	0	40	0	190	170	340	210																				
5	9	62	3200	0	0	60	650	250	0	2070	170	1630	300	71	4	50	3																
5	22	62	5300	0	20	440	830	190	40	2860	930	950	100	71	4	50	3	69	2	92	2	68	1										
6	5	62	2500	20	40	250	20	120	40	1470	500	520	100	71	3	69	3	92	2														
6	19	62	1900	0	40	0	0	600	0	770	480	170	80	57	2	71	2	92	1	69	1												
7	11	62	4400	0	40	130	40	0	0	2870	1310	630	630	68	4	67	2	69	2	88	2	92	1	71	1								
7	24	62	3200	0	0	340	80	40	40	1650	1010	970	380	67	3	68	2	69	2	88	2	92	1	38	1								
8	8	62	500	0	0	150	0	20	0	170	210	40	80																				
8	27	62	1700	0	0	120	40	60	0	910	540	170	0	67	2	69	2	92	1														
9	5	62	2600	0	0	270	0	190	40	1660	410	410	170	67	3	69	2	88	1	68	1												
9	19	62	2000	100	0	230	0	230	0	1180	290	290	170	69	3	68	2																

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-YAZOO RIVERS
STATION LOCATION MISSISSIPPI RIVER AT
DELTA, LOUISIANA 054

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	11	61										0	0	0											0							0	0
10	24	61	56	36	58	21	92	20	83	8	15	0	0	0											0							0	0
11	16	61										0	0	0											0							0	0
11	29	61										0	0	0											0							0	0
12	12	61	56	58	92	10	83	10	89	5	17	0	0	0											0							0	0
12	28	61	83	23	56	14	80	8	92	5	50	110	0	0											0							0	0
1	15	62	80	34	56	21	89	6	47	6	33	0	0	0											0							0	0
1	30	62										90	0	0											0							0	0
2	13	62										0	0	0											0							0	0
2	27	62	83	26	92	12	62	6	26	6	50	80	0	0											0							0	0
3	12	62	56	25	92	22	26	5	62	5	43	0	0	0											0							0	0
3	27	62										0	0	0											0							0	0
4	10	62	92	18	56	12	62	12	80	5	53	0	0	0											0							0	0
5	9	62	80	60	92	12	56	8	82	6	14	0	0	9	11	1									6	50	1					0	0
5	22	62	80	31	56	28	92	10	82	7	24	0	0	7	2	1									2							0	0
6	5	62	56	51	80	21	58	12	92	7	9	0	0	1											1							0	0
6	19	62	92	25	80	19	56	14	71	8	34	20	0	0											0							0	0
7	11	62	26	45	20	13	58	7	56	6	29	40	0	0											0							0	0
7	24	62	20	24	56	17	58	16	26	14	29	0	0	-											-							-	-
8	8	62	58	13	26	9	47	9	56	8	61	0	0	-											-							-	-
8	27	62	20	44	56	19	58	16	92	4	17	0	0	3											0							0	0
9	5	62	20	37	56	19	58	16	26	11	17	0	0	4											0							0	0
9	19	62	58	30	26	21	56	18	92	5	26	0	0	5											0							0	0

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Vicksburg, Mississippi
Operated by U.S. Geological Survey

STATE	Louisiana
MAJOR BASIN	Southwest-Lower Mississippi River
MINOR BASIN	Lower Mississippi-Yazoo Rivers
STATION LOCATION	Mississippi River at Delta, Louisiana

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	470.000	286.000	694.000	906.000	950.000	838.000	1418.000	1225.000	393.000	420.000	406.000	223.000
2	461.000	282.000	668.000	884.000	978.000	870.000	1434.000	1192.000	403.000	412.000	413.000	226.000
3	467.000	276.000	636.000	865.000	1014.000	926.000	1436.000	1158.000	416.000	404.000	408.000	226.000
4	473.000	269.000	601.000	840.000	1046.000	994.000	1430.000	1128.000	428.000	397.000	396.000	224.000
5	470.000	265.000	577.000	800.000	1076.000	1055.000	1414.000	1088.000	435.000	388.000	384.000	227.000
6	460.000	261.000	559.000	740.000	1093.000	1080.000	1408.000	1042.000	444.000	382.000	373.000	232.000
7	439.000	269.000	542.000	680.000	1107.000	1100.000	1410.000	990.000	460.000	370.000	360.000	238.000
8	419.000	294.000	525.000	632.000	1116.000	1175.000	1414.000	950.000	508.000	356.000	348.000	243.000
9	404.000	364.000	513.000	604.000	1122.000	1232.000	1420.000	900.000	545.000	340.000	336.000	249.000
10	397.000	441.000	504.000	578.000	1124.000	1268.000	1421.000	858.000	560.000	332.000	324.000	254.000
11	393.000	510.000	490.000	560.000	1118.000	1296.000	1422.000	822.000	566.000	350.000	315.000	258.000
12	394.000	561.000	488.000	566.000	1108.000	1318.000	1418.000	788.000	562.000	374.000	304.000	264.000
13	389.000	599.000	498.000	588.000	1094.000	1338.000	1412.000	756.000	545.000	390.000	298.000	270.000
14	377.000	611.000	520.000	618.000	1074.000	1350.000	1398.000	730.000	570.000	396.000	286.000	274.000
15	360.000	592.000	551.000	636.000	1052.000	1358.000	1380.000	696.000	594.000	392.000	286.000	279.000
16	340.000	565.000	587.000	653.000	1027.000	1365.000	1368.000	660.000	610.000	386.000	300.000	280.000
17	327.000	535.000	630.000	667.000	1000.000	1372.000	1356.000	615.000	622.000	380.000	293.000	281.000
18	311.000	512.000	678.000	682.000	972.000	1378.000	1347.000	592.000	628.000	376.000	280.000	288.000
19	322.000	489.000	712.000	696.000	942.000	1386.000	1338.000	585.000	626.000	372.000	264.000	292.000
20	336.000	468.000	734.000	708.000	920.000	1395.000	1332.000	576.000	622.000	367.000	254.000	314.000
21	342.000	456.000	750.000	724.000	894.000	1402.000	1326.000	570.000	610.000	364.000	247.000	314.000
22	354.000	452.000	766.000	734.000	868.000	1407.000	1322.000	558.000	594.000	370.000	241.000	312.000
23	365.000	468.000	794.000	736.000	840.000	1412.000	1316.000	540.000	580.000	384.000	238.000	314.000
24	367.000	503.000	821.000	736.000	820.000	1411.000	1312.000	510.000	562.000	396.000	234.000	322.000
25	361.000	561.000	847.000	738.000	810.000	1400.000	1307.000	480.000	542.000	407.000	230.000	330.000
26	348.000	633.000	868.000	760.000	808.000	1375.000	1301.000	458.000	514.000	406.000	227.000	326.000
27	333.000	685.000	891.000	792.000	808.000	1362.000	1296.000	442.000	486.000	400.000	223.000	322.000
28	317.000	718.000	901.000	825.000	818.000	1358.000	1286.000	428.000	462.000	390.000	220.000	316.000
29	305.000	731.000	914.000	865.000		1358.000	1278.000	412.000	445.000	380.000	218.000	304.000
30	297.000	713.000	919.000	896.000		1375.000	1252.000	394.000	432.000	372.000	217.000	296.000
31	292.000		923.000	924.000		1400.000		390.000		374.000	220.000	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	ARKANSAS
MAJOR BASIN	SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN	LOWER MISSISSIPPI-CAIRO TO HELENA
STATION LOCATION	MISSISSIPPI RIVER AT WEST MEMPHIS, ARKANSAS 22

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMI-NATION		ALPHA						BETA						DATE OF DETERMI-NATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	11	-	-	-	-	-	-	29	12	9	8	38	14						
10	9	61	10	30	-	-	-	-	-	-	9	9	14	7	23	11						
10	16	61	10	26	0	1	0	1	0	1	6	4	17	6	23	7						
10	23	61	11	1	-	-	-	-	-	-	44	12	14	7	58	14						
10	30	61	11	10	-	-	-	-	-	-	15	8	17	7	32	11						
11	6	61	11	17	-	-	-	-	-	-	31	7	33	6	64	9						
11	13	61	11	28	-	-	-	-	-	-	85	10	36	6	121	12						
11	20	61	12	1	1	2	1	1	2	2	48	7	30	6	78	9						
11	27	61	12	12	-	-	-	-	-	-	72	11	24	7	96	13						
12	4	61	12	14	-	-	-	-	-	-	37	10	28	8	65	13						
12	11	61	12	19	-	-	-	-	-	-	78	9	34	8	112	12						
12	18	61	12	27	6	3	1	1	7	3	80	9	32	6	112	11						
12	26	61	1	5	-	-	-	-	-	-	25	6	31	6	56	8						
1	8	62	1	25	-	-	-	-	-	-	18	7	27	7	45	10						
1	15	62	1	25	3	2	0	1	3	2	77	8	37	6	114	10						
1	22	62	2	2	-	-	-	-	-	-	63	8	36	7	99	11						
1	29	62	2	9	-	-	-	-	-	-	68	9	35	7	103	11						
2	5	62	2	14	-	-	-	-	-	-	45	9	26	7	71	11						
2	12	62	2	23	-	-	-	-	-	-	42	7	34	6	76	9						
2	19	62	3	5	4	4	1	1	5	4	71	13	32	6	103	14						
2	26	62	3	12	-	-	-	-	-	-	62	10	29	7	91	12						
5	5	62	6	8	-	-	-	-	-	-	84	11	25	9	109	14						
5	14	62	6	26	-	-	-	-	-	-	17	7	25	8	42	11						
5	21	62	6	26	3	2	1	1	4	2	28	9	23	7	51	11						
5	28	62	6	29	-	-	-	-	-	-	16	6	22	7	38	9						
6	4	62	7	5	-	-	-	-	-	-	27	14	35	9	62	17						
6	18	62	7	20	2	7	0	1	2	7	100	56	30	7	130	56						
6	25	62	8	14	-	-	-	-	-	-	85	62	33	8	118	63						
7	2	62	7	31	-	-	-	-	-	-	51	65	2	6	53	65						
7	9	62	8	6	-	-	-	-	-	-	22	5	27	6	49	7						
7	16	62	8	8	6	3	0	1	6	3	38	12	41	10	79	16						
7	23	62	8	9	-	-	-	-	-	-	10	7	30	8	40	11						
7	30	62	8	17	-	-	-	-	-	-	46	11	34	8	80	14						
8	6	62	8	28	-	-	-	-	-	-	48	10	27	8	75	13						
8	13	62	8	3	0	3	1	1	1	3	33	32	26	8	59	33						
8	20	62	9	6	-	-	-	-	-	-	13	7	29	8	42	11						
8	27	62	9	17	-	-	-	-	-	-	8	6	15	8	23	10						
9	4	62	10	6	-	-	-	-	-	-	3	6	19	8	22	10						
9	10	62	10	9	-	-	-	-	-	-	11	6	23	8	34	10						
9	17	62	10	15	3	3	1	1	4	3	56	30	21	8	77	31						
9	24	62	10	15	-	-	-	-	-	-	20	8	31	8	51	11						

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NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ARKANSAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-CAIRO TO HELENA
STATION LOCATION MISSISSIPPI RIVER AT
WEST MEMPHIS, ARKANSAS 22

DATE OF SAMPLE			ALGAE *(Number per milliliter)*									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	800	0	20	150	0	40	0	480	170	40	80	69	1																		
10	16	61	1600	0	60	310	0	40	40	890	210	210	120	69	2	68	2	71	1														
11	6	61	1700	0	20	370	0	190	0	1040	100	370	60	71	3	69	2	38	1														
11	20	61	1700	0	0	130	0	100	0	1240	270	350	210	71	3	69	1																
12	4	61	1800	0	0	120	0	80	20	1160	410	150	100	69	3	92	2	71	1														
12	18	61	1400	0	0	110	0	200	0	940	130	940	250	71	2																		
1	2	62	1700	0	0	40	0	0	0	1160	480	80	210	69	2	92	2																
1	15	62	1300	0	0	0	0	40	0	930	370	170	100																				
2	5	62	800	0	0	0	0	20	0	440	330	60	100	69	1	71	1																
2	19	62	600	0	0	0	0	0	0	290	340	70	20	69	1	84	1																
5	7	62	10800	0	0	150	630	80	0	4220	5700	3000	2410	71	5	92	3	50	3	88	2	69	1										
5	21	62	2800	40	0	400	310	20	0	1180	900	190	60	71	3	88	2	50	2	69	1	92	1										
6	4	62	2200	20	0	210	40	40	0	1180	730	410	80	71	3	92	2	69	2	38	1												
6	18	62	1400	0	0	0	0	100	0	990	310	270	60	71	2	69	2																
7	2	62	1500	0	0	130	150	20	0	630	590	760	380	71	1	69	1	88	1	92	1												
7	16	62	1500	0	0	80	0	270	0	750	370	250	40	69	1	68	1	57	1														
8	6	62	1500	0	0	0	0	40	0	840	550	550	380	68	2	69	1	71	1	88	1												
8	20	62	1100	0	0	210	0	20	0	660	250	80	0	69	1	67	1																
9	4	62	2600	40	0	290	0	120	0	1410	790	170	80	69	3	92	2	68	2	67	1												
9	17	62	600	0	30	170	0	10	0	220	190	420	210																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ARKANSAS

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN LOWER MISSISSIPPI-CAIRO TO HELENA

STATION LOCATION MISSISSIPPI RIVER AT

WEST MEMPHIS, ARKANSAS 022

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	56	36	58	33	26	4	18	4	23	20	0	0											0							0	0
10	16	61	56	42	58	27	92	10	26	8	13	0	0	1											0							0	0
11	6	61	83	34	56	31	58	12	80	7	16	9850	0	0											0							0	0
11	20	61	83	51	56	30	92	4	58	3	12	20	0	4											0							0	0
12	4	61	56	40	83	10	80	3	58	3	44	0	0	4											0							0	0
12	18	61	56	57	80	12	89	6	82	3	22	20	0	0											1							0	0
1	2	62	89	26	92	16	56	11	80	5	42	0	0	0											0							0	0
1	15	62	56	17	80	12	92	9	36	6	56	0	0	0											1							0	0
2	5	62	56	17	92	11	83	11	62	6	55	0	0	0											0							0	0
2	19	62										0	0	0											0							0	0
5	7	62	80	35	82	16	92	7	56	6	36	0	0	7											7	50	1					0	0
5	21	62	80	30	56	22	82	19	58	9	20	0	0	2											10	76	2	50	1			0	0
6	4	62	56	36	83	19	80	15	92	12	18	0	0	0											1							0	0
6	18	62	80	19	83	19	56	18	71	10	34	0	0	0											0							0	0
7	2	62	83	16	80	10	92	8	71	8	58	0	0	0											1							0	0
7	16	62	56	23	26	20	58	10	20	7	40	20	0	0											0							0	0
8	6	62	26	18	58	13	80	12	56	11	46	80	0	0											0							0	0
8	20	62	56	30	58	17	20	16	26	13	24	0	0	0											0							0	0
9	4	62	58	38	56	31	26	8	20	6	17	0	0	63	11	3	17	3	22	2					57	50	5	77	2			0	0
9	17	62	26	21	56	17	58	14	92	7	41	0	0	-											-							-	-

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE ARKANSAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-CAIRO TO HELENA
STATION LOCATION MISSISSIPPI RIVER AT
WEST MEMPHIS, ARKANSAS 22

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	12	61	10	23	4780	112	35	77	1	8	14	2	1	10	1	5	2	1	4
5	10	62	5	21	5050	111	46	65	1	12	15	2	1	12	0	5	4	1	8
6	7	62	6	18	2860	129	45	84	1	12	14	2	2	10	0	5	4	1	8
7	31	62	8	6	3150	109	41	68	1	12	15	2	1	12	0	5	3	1	4
8	20	62	8	27	2150	122	42	80	0	10	18	3	1	14	0	5	1	1	7

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ARKANSAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER MISSISSIPPI-CAIRO TO HELENA
STATION LOCATION MISSISSIPPI RIVER AT
WEST MEMPHIS, ARKANSAS 22

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	19.1	7.2	7.8	.7	30	2.8	8.3	.1	8	106	154	18	550	43	.2	210	23000
10	9	61	19.2	7.6	7.9	.7	19	1.9	7.6	.0	12	100	142	16	260	43	.2	216	50000
10	16	61	18.4	7.8	7.9	2.0	15	2.6	6.4	.1	12	120	168	17	270	50	-	-	65000
10	23	61	16.2	7.8	8.0	.9	36	3.0	9.8	.1	13	122	166	17	700	50	.2	248	15000
10	30	61	16.4	8.5	8.0	1.1	19	2.5	9.3	.4	15	124	172	18	180	47	.2	272	43000
11	6	61	13.5	9.1	8.1	1.0	14	2.9	9.3	.2	17	136	194	11	160	53	.1	278	23000
11	13	61	11.9	7.5	7.9	-	26	2.9	10.5	.3	13	106	148	21	900	47	.3	214	-
11	20	61	10.0	9.6	8.0	1.4	23	3.0	9.8	.2	16	114	168	19	200	48	.1	234	8000
11	27	61	8.7	9.8	8.0	1.8	38	3.9	11.2	.2	13	96	144	17	600	39	.2	202	22000
12	4	61	8.9	10.0	7.8	1.0	24	4.9	12.3	.2	18	106	166	17	200	53	.2	246	60000
12	11	61	7.5	10.2	8.0	1.5	20	4.1	10.3	.3	22	122	172	13	175	59	.3	292	23000
12	18	61	6.6	11.5	7.9	1.7	18	3.1	9.7	.2	18	90	134	12	150	45	.2	212	29000
12	26	61	7.2	10.4	7.9	1.1	27	2.7	7.3	.4	16	76	112	16	170	40	.1	196	12000
1	2	62	3.8	12.2	8.0	1.9	29	2.8	8.0	.2	13	86	118	14	170	34	.0	196	-
1	8	62	3.8	12.4	8.1	1.6	19	3.3	7.9	.3	11	96	106	14	100	36	.0	202	11000
1	15	62	1.6	13.8	8.1	2.5	19	3.1	7.9	.0	15	94	126	10	140	34	.1	200	6600
1	22	62	2.8	12.7	7.9	4.6	22	4.0	9.0	.3	12	76	108	15	210	32	.0	180	14000
1	29	62	3.1	12.4	7.8	3.7	22	-	-	.5	10	78	106	14	280	28	.1	168	37000
2	5	62	5.8	11.9	7.9	2.4	26	4.1	9.8	.4	10	76	100	15	230	32	.1	160	4100
2	12	62	5.0	11.6	7.9	1.6	23	4.5	11.4	.4	11	84	120	16	250	40	.0	180	12000
2	19	62	6.4	11.0	7.8	2.0	21	3.8	10.8	.4	11	90	138	17	190	45	.0	196	6200
2	26	62	6.0	11.3	7.9	1.4	22	3.9	10.0	-	8	90	112	8	250	35	.0	174	12000
5	7	62	19.9	-	7.8	-	52	2.4	5.7	.2	10	93	140	14	140	36	.0	226	31000
5	14	62	23.5	5.6	7.9	.4	19	3.6	10.5	.1	10	102	154	12	95	37	.0	224	13000
5	21	62	24.6	6.1	7.8	.5	19	2.8	8.6	.0	10	112	168	13	210	46	.0	244	39000
5	28	62	25.9	6.6	7.9	.7	13	2.1	6.9	.1	12	128	188	13	100	54	.1	278	36000
6	4	62	25.0	6.6	7.9	.9	17	2.7	8.6	.2	14	126	190	12	200	61	.1	284	52000
6	11	62	25.0	5.8	7.8	.4	54	3.1	9.0	.2	10	100	144	21	1300	36	.0	214	48000
6	18	62	25.7	5.9	7.9	.7	31	2.7	8.6	.2	9	108	156	21	700	36	.2	222	50000
6	25	62	26.4	6.1	7.9	.5	35	2.7	8.4	.1	10	106	148	22	650	29	.1	224	41000
7	2	62	28.0	6.3	7.8	.5	18	2.1	7.1	.3	13	116	170	21	250	48	.2	262	47000
7	9	62	29.4	6.1	7.9	.6	21	3.8	10.7	.0	12	111	164	22	310	46	.1	266	44000
7	16	62	29.8	6.0	7.8	.7	15	2.4	8.0	.2	15	104	162	19	270	57	.0	264	52000
7	23	62	30.2	6.0	7.9	.5	17	2.6	8.2	.1	15	106	170	15	240	64	.1	280	35000
7	30	62	28.3	6.3	7.9	.9	32	3.1	7.8	.3	12	116	162	21	450	35	.1	250	82000
8	6	62	27.8	6.4	7.9	.4	26	3.0	8.1	.2	11	122	170	17	410	47	.1	270	72000
8	13	62	28.0	6.5	7.9	.6	21	2.4	7.6	.3	11	116	168	17	340	44	.2	258	37000
8	20	62	27.7	6.8	7.9	.9	15	2.8	8.4	.2	13	136	184	17	160	45	.1	282	12000
8	27	62	27.0	7.0	8.0	.7	12	2.3	6.6	.2	14	134	190	15	90	60	.0	292	57000

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ARKANSAS

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN LOWER-MISSISSIPPI-CAIRO TO HELENA

STATION LOCATION MISSISSIPPI RIVER AT
WEST MEMPHIS, ARKANSAS 22

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
9	4	62	27.9	6.8	8.0	.6	19	1.9	5.8	.2	13	132	178	13	80	65	.1	284	48000
9	10	62	25.0	7.1	8.1	.6	15	-	5.1	.3	13	120	172	13	130	65	.1	267	25000
9	17	62	24.8	-	8.0	-	19	2.6	8.6	.0	14	120	170	17	290	55	.0	274	-
9	24	62	23.0	7.5	8.0	.7	26	2.4	8.3	.1	13	110	136	17	350	56	.2	264	64000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Memphis, Tennessee
Operated by U.S. Geological Survey

STATE	Arkansas
MAJOR BASIN	Southwest-Lower Mississippi River
MINOR BASIN	Lower Mississippi-Cairo to Helena
STATION LOCATION	Mississippi River at West Memphis, Arkansas

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	409.000	208.000	478.000	663.000	915.000	927.000	1256.000	775.000	365.000	331.000	345.000	178.000
2	389.000	206.000	458.000	573.000	931.000	1004.000	1251.000	733.000	377.000	324.000	322.000	188.000
3	363.000	215.000	445.000	503.000	947.000	1055.000	1251.000	704.000	385.000	310.000	304.000	195.000
4	340.000	224.000	434.000	456.000	955.000	1101.000	1247.000	688.000	406.000	297.000	295.000	197.000
5	319.000	254.000	421.000	424.000	967.000	1151.000	1251.000	672.000	447.000	286.000	284.000	199.000
6	306.000	319.000	401.000	401.000	963.000	1189.000	1251.000	660.000	484.000	275.000	273.000	208.000
7	315.000	382.000	377.000	385.000	959.000	1213.000	1247.000	645.000	500.000	271.000	267.000	222.000
8	331.000	440.000	335.000	373.000	955.000	1232.000	1242.000	624.000	498.000	286.000	258.000	232.000
9	342.000	484.000	313.000	394.000	947.000	1247.000	1237.000	597.000	489.000	317.000	248.000	238.000
10	335.000	503.000	315.000	453.000	931.000	1251.000	1223.000	570.000	486.000	340.000	244.000	238.000
11	317.000	514.000	326.000	512.000	907.000	1251.000	1213.000	543.000	503.000	345.000	248.000	238.000
12	308.000	509.000	368.000	540.000	877.000	1247.000	1208.000	517.000	512.000	333.000	248.000	242.000
13	295.000	478.000	421.000	558.000	843.000	1247.000	1194.000	492.000	512.000	324.000	242.000	244.000
14	273.000	432.000	475.000	558.000	806.000	1247.000	1179.000	470.000	514.000	317.000	236.000	244.000
15	252.000	397.000	509.000	561.000	768.000	1251.000	1179.000	458.000	528.000	315.000	224.000	248.000
16	244.000	373.000	537.000	561.000	736.000	1251.000	1170.000	464.000	540.000	315.000	217.000	262.000
17	240.000	354.000	570.000	579.000	704.000	1261.000	1170.000	470.000	546.000	313.000	209.000	277.000
18	258.000	342.000	579.000	600.000	675.000	1266.000	1175.000	464.000	552.000	315.000	199.000	273.000
19	297.000	340.000	594.000	606.000	657.000	1271.000	1175.000	453.000	552.000	326.000	192.000	258.000
20	319.000	352.000	624.000	594.000	645.000	1276.000	1170.000	440.000	540.000	342.000	190.000	248.000
21	322.000	382.000	660.000	573.000	639.000	1281.000	1165.000	419.000	517.000	373.000	188.000	248.000
22	306.000	445.000	698.000	561.000	639.000	1266.000	1156.000	392.000	481.000	392.000	183.000	250.000
23	286.000	517.000	730.000	558.000	639.000	1247.000	1151.000	375.000	442.000	377.000	178.000	244.000
24	269.000	552.000	752.000	567.000	636.000	1227.000	1137.000	365.000	416.000	356.000	176.000	228.000
25	256.000	576.000	772.000	600.000	639.000	1223.000	1124.000	354.000	401.000	349.000	173.000	215.000
26	248.000	585.000	792.000	654.000	691.000	1227.000	1096.000	345.000	382.000	342.000	171.000	208.000
27	246.000	582.000	816.000	711.000	768.000	1227.000	1047.000	349.000	368.000	335.000	171.000	202.000
28	245.000	561.000	826.000	765.000	847.000	1227.000	983.000	331.000	358.000	340.000	175.000	200.000
29	244.000	534.000	819.000	806.000		1232.000	903.000	333.000	352.000	356.000	176.000	199.000
30	236.000	503.000	785.000	847.000		1242.000	819.000	345.000	338.000	363.000	181.000	200.000
31	221.000		736.000	884.000		1256.000		354.000		358.000	176.000	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MISSOURI
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-CAPE GIRARDEAU AREA
STATION LOCATION MISSISSIPPI RIVER AT
CAPE GIRARDEAU, MISSOURI 23

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	18	7	6	1	1	8	6	65	10	20	6	85	13						
10	9	61	10	24	-	-	-	-	-	-	101	23	8	7	109	24						
10	16	61	10	31	-	-	-	-	-	-	27	18	27	14	54	23						
10	23	61	11	2	-	-	-	-	-	-	39	12	21	8	60	14						
10	30	61	11	9	-	-	-	-	-	-	28	11	22	11	50	16						
11	6	61	11	17	8	6	2	1	10	6	104	10	59	6	163	12						
11	13	61	11	28	-	-	-	-	-	-	261	39	50	17	311	43						
11	20	61	12	1	-	-	-	-	-	-	49	8	55	7	104	11						
11	27	61	12	6	-	-	-	-	-	-	69	10	44	8	113	13						
12	4	61	12	13	0	1	2	2	2	2	23	6	28	6	51	8						
12	11	61	12	22	-	-	-	-	-	-	15	8	18	9	33	12						
12	18	61	12	28	-	-	-	-	-	-	20	6	32	9	52	11						
12	26	61	1	5	-	-	-	-	-	-	32	14	27	13	59	19						
1	2	62	1	15	0	1	2	2	2	2	13	12	11	14	24	18						
1	8	62	1	22	-	-	-	-	-	-	73	13	26	10	99	16						
1	15	62	1	30	-	-	-	-	-	-	58	9	29	8	87	12						
1	22	62	2	5	-	-	-	-	-	-	123	12	35	8	158	14						
1	29	62	2	8	-	-	-	-	-	-	76	17	30	13	106	21						
2	5	62	2	16	1	2	2	2	3	3	37	7	36	7	73	10						
2	12	62	2	23	-	-	-	-	-	-	59	11	29	8	88	14						
2	19	62	3	5	-	-	-	-	-	-	67	18	28	8	95	20						
2	26	62	3	12	-	-	-	-	-	-	168	24	43	8	211	25						
3	12	62	3	26	0	1	2	2	2	2	41	10	40	11	81	15						
3	19	62	3	30	-	-	-	-	-	-	264	22	51	7	315	23						
3	26	62	3	26	-	-	-	-	-	-	107	13	43	8	150	15						
4	2	62	4	13	12	10	2	2	14	10	93	30	48	6	141	32						
4	9	62	6	14	-	-	-	-	-	-	71	24	34	9	105	26						
4	16	62	5	1	-	-	-	-	-	-	38	17	32	8	70	19						
4	23	62	5	23	-	-	-	-	-	-	34	12	27	10	61	15						
4	30	62	6	4	-	-	-	-	-	-	34	13	19	7	53	15						
5	7	62	6	5	1	2	2	2	3	3	31	9	28	8	59	12						
5	21	62	6	22	-	-	-	-	-	-	59	11	36	9	95	14						
5	28	62	6	29	-	-	-	-	-	-	63	11	34	8	97	14						
6	4	62	7	6	56	38	2	2	58	38	393	84	40	7	433	84						
6	11	62	7	12	-	-	-	-	-	-	121	82	36	9	157	82						
6	18	62	7	17	-	-	-	-	-	-	150	77	39	8	189	77						
6	25	62	7	24	-	-	-	-	-	-	47	63	34	8	81	64						
7	23	62	8	8	47	39	1	2	48	39	41	11	35	9	76	14						
7	30	62	8	21	-	-	-	-	-	-	83	37	38	8	121	38						
8	6	62	8	28	3	4	2	2	5	4	54	17	39	13	93	21						
8	13	62	8	30	-	-	-	-	-	-	77	61	28	14	105	63						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MISSOURI
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-CAPE GIRARDEAU AREA
STATION LOCATION MISSISSIPPI RIVER AT
CAPE GIRARDEAU, MISSOURI 23

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	20	62	9	5	-	-	-	-	-	-	27	14	37	15	64	21						
8	27	62	9	25	-	-	-	-	-	-	24	17	26	17	50	24						
9	4	62	9	19	1	2	2	2	3	3	13	13	29	13	42	18						
9	10	62	10	9	-	-	-	-	-	-	67	65	33	14	100	66						
9	17	62	10	9	-	-	-	-	-	-	46	73	18	10	64	74						
9	24	62	10	16	-	-	-	-	-	-	21	15	18	13	39	20						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MISSOURI
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-CAPE GIRARDEAU AREA
STATION LOCATION MISSISSIPPI RIVER AT
CAPE GIRARDEAU, MISSOURI 23

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	300	0	0	20	0	0	0	250	0	160	250																				
10	16	61	1100	0	0	100	0	100	0	640	210	190	120	71	2	69	1	68	1														
11	6	61	1200	0	0	40	0	20	0	870	290	20	20																				
11	20	61	2100	0	100	20	0	40	0	1620	350	80	170	71	4																		
12	4	61	1300	0	0	40	0	20	0	1040	190	290	100	71	3																		
12	11	61	00	0	0	0	0	0	0	20	0	0	0																				
1	2	62	8200	20	0	250	0	410	140	7020	340	1060	110	71	6	51	2																
1	15	62	2500	250	20	90	0	540	70	1190	320	180	180	71	3	51	2	2	1														
2	5	62	1000	0	20	40	0	20	0	350	520	20	80	71	2	88	1																
2	19	62	300	0	0	0	0	20	0	130	130	20	110																				
3	5	62	700	0	0	0	0	150	40	270	270	40	20	71	1																		
3	19	62	400	0	0	0	0	0	0	220	180	20	70																				
4	2	62	800	0	0	20	0	0	20	190	540	0	40	92	1	88	1																
4	16	62	600	0	0	70	0	20	50	200	250	380	180																				
5	7	62	7500	0	20	560	430	460	80	4910	1010	1800	440	50	2	51	2	25	1	69	1												
5	21	62	7600	0	80	480	80	150	0	5400	1370	4680	1100	71	5	69	2	68	2	38	1	92	1	88	1								
6	4	62	1200	0	0	0	20	170	40	600	370	40	40	71	2	88	1																
6	18	62	700	0	0	20	0	0	0	410	230	0	0	71	1																		
7	2	62	2300	0	0	150	0	150	0	1010	970	510	510	69	2	67	2	92	2	88	1												
7	16	62	900	0	0	0	0	210	0	330	330	120	170	57	1																		
8	6	62	1700	0	20	40	0	330	0	700	580	290	80	68	1	69	1	71	1	51	1												
8	20	62	2500	0	0	290	0	170	120	1350	540	540	170	69	2	71	2	68	1	67	1	35	1										
9	4	62	9300	0	0	720	0	170	0	5570	2870	4220	1390	68	5	71	4	92	4	69	3	88	3	38	2	51	1						
9	17	62	2500	0	80	170	0	230	0	1370	660	540	330	68	2	69	2	71	1	88	1	38	1										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MISSOURI
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-CAPE GIRARDEAU AREA
STATION LOCATION MISSISSIPPI RIVER AT
CAPE GIRARDEAU, MISSOURI 023

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	58	28	56	21	26	11	18	7	33	0	0	0											1							0	0
10	16	61	56	35	58	30	26	9	83	9	17	0	0	0											0							0	0
11	6	61	83	43	56	32	58	8	92	3	14	0	0	0											0							0	0
11	20	61	83	37	56	32	80	8	71	3	20	0	0	0											0							0	0
12	4	61	83	71	56	13	80	6	92	3	7	0	0	1											0							0	0
12	11	61										0	0	0											0							0	0
1	2	62	80	87	83	5	95	2	56	1	5	180	0	1											0							0	0
1	15	62										20	0	0											1							0	0
2	5	62	71	27	36	9	92	8	83	7	49	20	0	0											0							0	0
2	19	62										20	0	0											0							0	0
3	5	62	71	31	92	13	83	10	46	7	39	0	0	0											0							0	0
3	19	62	71	23	80	17	83	14	92	7	39	20	0	0											0							0	0
4	2	62	92	13	48	12	86	7	36	6	62	0	0	0											1							0	0
4	16	62	56	34	71	15	92	12	83	9	30	0	0	0											0							0	0
5	7	62										80	0	2											3							0	0
5	21	62	80	40	56	28	58	5	92	5	22	40	0	33	11	3	2	1							19	50	3	76	2-			0	0
6	4	62	80	21	71	18	92	8	86	6	47	0	0	1											3							0	0
6	18	62	83	30	56	15	80	9	71	7	39	0	0	-											-							-	-
7	2	62	18	61	80	15	92	4	56	3	17	0	0	0											0							0	0
7	16	62	26	21	58	18	20	14	56	9	38	40	0	1											0							0	0
8	6	62	58	31	56	28	26	10	80	6	25	0	0	2											1							0	0
8	20	62	56	31	26	14	20	11	82	9	35	0	0	17	11	1	2	1							6	75	2					0	0
9	4	62	26	19	56	19	58	19	92	12	31	0	0	15	11	1	17	1							7	76	2					3	0
9	17	62	26	21	58	19	56	18	82	5	37	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MISSOURI
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-CAPE GIRARDEAU AREA
STATION LOCATION MISSISSIPPI RIVER AT
CAPE GIRARDEAU, MISSOURI 23

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	5	61	10	16	3038	150	45	105	0	11	16	2	1	12	1	6	2	1	9
11	9	61	11	20	2453	303	66	237	1	15	30	2	2	22	4	9	3	2	6
12	8	61	12	18	2850	286	93	193	3	27	25	2	2	19	2	9	8	2	19
1	5	62	1	15	3533	286	82	204	2	15	32	2	3	25	2	12	5	1	15
2	8	62	2	19	2580	418	119	299	2	30	45	2	3	37	3	16	6	2	18
3	12	62	3	19	1875	486	135	351	3	34	43	2	3	35	3	19	11	3	22
4	4	62	4	16	3046	352	115	237	2	29	38	3	2	27	6	14	12	1	19
5	7	62	5	21	3375	242	128	114	8	35	31	2	1	26	2	15	14	1	24
7	2	62	7	16	2985	292	125	167	3	33	33	2	3	27	1	18	11	1	26
8	6	62	8	20	3517	237	102	135	2	22	34	3	2	27	2	19	8	2	15
9	6	62	9	17	2265	294	83	211	1	18	28	2	2	23	1	15	5	2	14

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MISSOURI
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-CAPE GIRARDEAU AREA
STATION LOCATION MISSISSIPPI RIVER AT
CAPE GIRARDEAU, MISSOURI 23

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	19.0	-	7.7	-	-	-	-	-	11	104	130	20	580	51	.0	-	-
10	9	61	17.5	-	7.7	-	27	-	-	-	15	110	170	-	820	-	-	-	-
10	16	61	18.0	-	7.7	-	-	-	-	-	16	158	216	10	460	90	.1	310	-
10	23	61	16.0	-	7.7	-	-	-	-	-	14	140	180	-	500	66	.0	238	-
10	30	61	15.0	-	7.7	-	-	-	-	-	19	186	210	5	220	87	.4	307	-
11	6	61	14.5	-	7.7	-	-	-	-	-	13	136	140	15	920	45	.4	227	-
11	9	61	-	-	-	-	-	-	-	-	-	-	-	10	-	58	.2	235	-
11	13	61	11.5	-	7.7	-	-	-	-	-	15	100	140	-	500	-	-	-	-
11	20	61	9.0	-	7.7	-	-	-	-	-	12	122	150	10	460	55	.0	256	-
11	27	61	8.0	-	7.7	-	-	-	-	-	10	120	146	10	460	52	.3	-	-
12	4	61	8.0	-	7.7	-	-	-	-	-	13	168	202	5	260	35	.0	-	-
12	11	61	6.5	-	7.7	-	18	-	-	-	17	182	240	10	140	40	.0	302	-
12	18	61	3.5	-	7.8	-	-	-	-	-	21	186	244	-	260	-	-	-	-
12	26	61	3.5	-	7.7	-	-	-	-	-	18	122	226	-	180	-	-	-	-
1	2	62	2.0	-	7.7	-	-	-	-	-	19	192	196	-	140	-	-	-	-
1	8	62	2.0	-	7.7	-	14	-	-	-	21	196	244	5	220	75	.1	338	-
1	15	62	2.0	-	7.7	-	-	-	-	-	15	148	188	-	220	50	-	-	-
1	22	62	2.5	-	7.7	-	-	-	-	-	17	164	186	-	220	60	.0	-	-
1	29	62	2.0	-	7.6	-	-	-	-	-	19	138	210	10	220	65	.0	312	-
2	5	62	3.0	-	7.5	-	-	-	-	-	18	146	194	-	260	57	.0	-	-
2	12	62	2.5	-	7.6	-	19	-	-	-	11	124	158	-	500	60	.2	-	-
2	19	62	4.0	-	7.6	-	-	-	-	-	15	140	160	20	300	55	.1	-	-
2	26	62	4.0	-	7.7	-	-	-	-	-	14	132	168	20	540	60	.0	-	-
3	5	62	4.0	-	7.7	-	-	-	-	-	15	160	202	-	220	-	-	-	-
3	12	62	4.0	-	7.7	-	-	-	-	-	16	184	220	-	120	-	-	-	-
3	19	62	4.5	-	7.6	-	-	-	-	-	15	128	152	-	680	-	-	-	-
3	26	62	6.0	-	7.5	-	-	-	-	-	10	100	120	-	820	-	-	-	-
4	2	62	7.0	-	7.6	-	-	-	-	-	10	122	156	-	540	-	-	246	-
4	9	62	9.0	-	7.6	-	24	-	-	-	9	124	154	-	540	25	.0	-	-
4	16	62	9.0	-	7.6	-	-	-	-	-	12	138	174	15	300	30	.1	128	-
4	23	62	12.5	-	7.7	-	-	-	-	-	12	124	152	5	220	10	.1	302	-
4	30	62	15.0	-	7.7	-	-	-	-	-	11	140	166	10	220	60	-	246	-
5	1	62	-	-	-	-	-	-	-	-	-	-	-	10	-	60	.0	262	-
5	7	62	20.0	-	7.7	-	-	-	-	-	12	140	162	-	220	-	-	-	-
5	14	62	22.0	-	7.7	-	-	-	-	-	12	152	200	-	260	-	-	-	-
5	21	62	25.0	-	7.6	-	-	-	-	-	17	150	200	10	220	75	.0	-	-
5	28	62	25.0	-	7.7	-	-	-	-	-	17	160	218	10	220	80	.0	331	-
6	4	62	23.5	-	7.7	-	-	-	-	-	13	130	170	-	1840	-	-	-	-
6	11	62	24.0	-	7.7	-	-	-	-	-	12	108	162	-	960	-	-	-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MISSOURI
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-CAPE GIRARDEAU AREA
STATION LOCATION MISSISSIPPI RIVER AT
CAPE GIRARDEAU, MISSOURI. 23

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	18	62	24.0	-	7.8	-	-	-	-	-	11	118	154	-	1260	-	-	-	-
6	25	62	24.0	-	7.7	-	-	-	-	-	13	124	178	-	460	-	-	-	-
7	2	62	28.0	-	7.8	-	-	-	-	-	16	152	166	-	580	-	-	-	-
7	9	62	29.0	-	7.7	-	36	-	-	-	15	134	180	-	500	-	-	-	-
7	16	62	30.0	-	7.7	-	-	-	-	-	14	160	196	-	380	-	-	-	-
7	23	62	30.0	-	7.7	-	-	-	-	-	17	138	178	-	500	-	-	-	-
7	30	62	26.5	-	7.7	-	-	-	-	-	17	154	182	10	640	65	.2	320	-
8	6	62	28.5	-	7.8	-	-	-	-	-	17	160	180	15	380	125	.2	331	-
8	13	62	27.0	-	7.7	-	18	-	-	-	17	156	186	15	300	80	.1	316	-
8	20	62	27.0	-	7.7	-	-	-	-	-	18	170	200	15	260	95	.0	375	-
8	27	62	27.0	-	7.7	-	-	-	-	-	18	164	206	-	220	-	-	-	-
9	4	62	26.0	-	7.7	-	-	-	-	-	18	160	200	10	220	95	.1	370	-
9	10	62	24.0	-	7.8	-	30	-	-	-	17	150	190	5	540	85	.1	360	-
9	17	62	23.5	-	7.7	-	-	-	-	-	17	132	202	10	340	85	.1	365	-
9	24	62	22.0	-	7.8	-	-	-	-	-	17	144	200	10	220	85	.1	355	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Thebes, Illinois
Operated by U.S. Geological Survey

STATE	**Missouri**
MAJOR BASIN	**Upper Mississippi River**
MINOR BASIN	**Mississippi-Cape Girardeau Area**
STATION LOCATION	**Mississippi River at Cape Girardeau, Missouri**

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	253.000	136.000	221.000	123.000	236.000	227.000	575.000	321.000	228.000	179.000	179.000	113.000
2	227.000	166.000	202.000	128.000	245.000	211.000	564.000	332.000	293.000	173.000	165.000	104.000
3	216.000	236.000	188.000	120.000	238.000	204.000	549.000	331.000	360.000	167.000	159.000	105.000
4	228.000	300.000	180.000	111.000	241.000	200.000	539.000	329.000	372.000	163.000	159.000	114.000
5	251.000	349.000	171.000	110.000	256.000	196.000	527.000	315.000	351.000	180.000	159.000	125.000
6	263.000	390.000	163.000	120.000	270.000	186.000	519.000	294.000	332.000	200.000	155.000	138.000
7	249.000	405.000	154.000	141.000	286.000	171.000	513.000	273.000	317.000	214.000	154.000	152.000
8	227.000	402.000	155.000	155.000	312.000	161.000	505.000	255.000	316.000	208.000	155.000	154.000
9	213.000	384.000	158.000	156.000	320.000	161.000	498.000	242.000	326.000	196.000	145.000	159.000
10	197.000	358.000	153.000	160.000	317.000	170.000	492.000	234.000	339.000	188.000	140.000	164.000
11	178.000	319.000	149.000	148.000	322.000	177.000	484.000	233.000	345.000	183.000	140.000	168.000
12	166.000	282.000	147.000	138.000	307.000	180.000	479.000	246.000	347.000	182.000	139.000	168.000
13	166.000	255.000	143.000	140.000	288.000	190.000	477.000	261.000	341.000	180.000	133.000	165.000
14	162.000	230.000	131.000	146.000	272.000	241.000	465.000	267.000	341.000	179.000	129.000	167.000
15	182.000	221.000	118.000	142.000	257.000	292.000	457.000	264.000	352.000	177.000	120.000	158.000
16	240.000	219.000	109.000	150.000	252.000	312.000	446.000	257.000	352.000	179.000	115.000	140.000
17	261.000	220.000	117.000	146.000	261.000	312.000	428.000	248.000	337.000	181.000	115.000	138.000
18	255.000	251.000	122.000	134.000	269.000	299.000	412.000	243.000	316.000	193.000	117.000	140.000
19	233.000	325.000	121.000	128.000	287.000	288.000	393.000	239.000	285.000	200.000	112.000	139.000
20	207.000	383.000	122.000	130.000	300.000	288.000	379.000	234.000	260.000	201.000	106.000	135.000
21	179.000	404.000	127.000	129.000	291.000	329.000	364.000	227.000	243.000	195.000	103.000	134.000
22	161.000	405.000	131.000	157.000	276.000	399.000	350.000	216.000	227.000	194.000	103.000	133.000
23	156.000	406.000	139.000	165.000	266.000	473.000	338.000	206.000	216.000	196.000	102.000	132.000
24	151.000	394.000	149.000	152.000	269.000	528.000	330.000	200.000	210.000	198.000	102.000	132.000
25	150.000	372.000	155.000	141.000	251.000	573.000	324.000	199.000	209.000	206.000	105.000	132.000
26	142.000	343.000	151.000	137.000	240.000	613.000	318.000	203.000	212.000	227.000	103.000	132.000
27	137.000	310.000	147.000	144.000	240.000	625.000	315.000	204.000	205.000	237.000	100.000	129.000
28	124.000	284.000	142.000	154.000	238.000	604.000	314.000	207.000	202.000	229.000	96.000	132.000
29	115.000	263.000	139.000	177.000		591.000	317.000	211.000	203.000	213.000	102.000	144.000
30	116.000	242.000	128.000	191.000		589.000	314.000	217.000	191.000	196.000	115.000	151.000
31	118.000		120.000	195.000		584.000		219.000		187.000	122.000	

RADIOACTIVITY DETERMINATIONS

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI RIVER-ST. LOUIS AREA
STATION LOCATION MISSISSIPPI RIVER AT
EAST ST. LOUIS, ILLINOIS 24

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMI-NATION		ALPHA						BETA						DATE OF DETERMI-NATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	16	-	-	-	-	-	-	28	9	12	6	40	11						
10	9	61	10	20	1	2	1	1	1	2	11	12	4	5	15	13						
10	16	61	10	30	0	1	1	2	1	2	11	10	12	10	23	14						
10	23	61	11	1	-	-	-	-	-	-	0	11	23	15	23	19						
10	30	61	11	3	-	-	-	-	-	-	11	11	56	14	67	18						
11	6	61	11	15	-	-	-	-	-	-	32	10	15	6	47	12						
11	13	61	11	22	1	1	0	2	1	2	47	9	48	10	95	13						
11	20	61	11	30	-	-	-	-	-	-	44	9	11	6	55	11						
11	27	61	12	6	-	-	-	-	-	-	38	8	27	7	65	11						
12	4	61	12	12	0	1	1	2	1	2	19	5	34	7	53	9						
12	11	61	12	15	-	-	-	-	-	-	20	7	30	8	50	11						
12	18	61	12	28	-	-	-	-	-	-	68	11	38	9	106	17						
1	8	62	1	16	0	1	2	2	2	2	27	9	38	11	65	14						
1	15	62	1	25	-	-	-	-	-	-	33	6	32	8	65	10						
1	22	62	1	30	-	-	-	-	-	-	7	5	25	9	32	10						
1	29	62	2	6	-	-	-	-	-	-	20	12	44	14	64	18						
2	12	62	2	23	2	2	0	0	2	2	27	6	115	6	142	8						
2	19	62	3	2	-	-	-	-	-	-	20	10	42	11	62	15						
2	26	62	3	7	-	-	-	-	-	-	72	14	43	13	115	19						
3	5	62	3	16	-	-	-	-	-	-	34	5	19	5	53	9						
3	12	62	3	22	2	1	0	2	2	2	65	7	39	7	104	10						
3	19	62	3	30	-	-	-	-	-	-	174	10	101	7	275	12						
3	26	62	4	5	-	-	-	-	-	-	132	18	53	8	185	20						
4	2	62	4	12	-	-	-	-	-	-	49	9	50	8	99	12						
4	9	62	4	23	3	3	0	1	3	3	76	13	45	6	121	14						
4	16	62	4	27	-	-	-	-	-	-	18	8	32	8	50	11						
4	23	62	5	22	-	-	-	-	-	-	36	10	22	10	58	14						
4	30	62	5	31	-	-	-	-	-	-	45	11	9	9	54	14						
5	7	62	6	11	-	-	-	-	-	-	16	9	22	10	38	14						
5	14	62	6	20	10	55	0	0	10	55	84	20	29	8	113	22						
5	21	62	6	27	-	-	-	-	-	-	40	11	45	10	85	15						
5	28	62	6	30	-	-	-	-	-	-	34	5	32	5	66	7						
6	4	62	7	5	-	-	-	-	-	-	116	43	38	9	154	44						
6	11	62	7	9	4	8	2	2	6	8	157	69	27	8	184	69						
6	18	62	7	16	-	-	-	-	-	-	49	61	28	9	77	62						
6	25	62	9	9	-	-	-	-	-	-	15	5	26	6	41	8						
7	2	62	7	26	-	-	-	-	-	-	13	7	36	8	49	11						
7	9	62	8	15	0	0	0	1	0	1	22	6	57	9	79	11						
7	30	62	8	21	-	-	-	-	-	-	13	7	30	9	43	11						
8	7	62	8	27	-	-	-	-	-	-	0	3	15	4	15	5						
8	13	62	8	29	-	-	-	-	-	-	4	5	23	8	27	9						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE ILLINOIS

MAJOR BASIN UPPER MISSISSIPPI RIVER

MINOR BASIN MISSISSIPPI RIVER-ST. LOUIS AREA

STATION LOCATION MISSISSIPPI RIVER AT

EAST ST. LOUIS, ILLINOIS 24

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	20	62	9	5	-	-	-	-	-	-	6	12	31	14	37	18						
8	27	62	9	6	-	-	-	-	-	-	8	11	30	13	38	17						
9	4	62	9	28	-	-	-	-	-	-	4	7	18	10	22	12						
9	10	62	9	24	0	1	2	2	2	2	11	6	33	8	44	10						
9	17	62	10	15	-	-	-	-	-	-	39	28	25	8	64	29						
9	24	62	10	15	-	-	-	-	-	-	7	6	16	8	23	10						

687-228 O-63—28

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ILLINOIS

MAJOR BASIN UPPER MISSISSIPPI RIVER

MINOR BASIN MISSISSIPPI RIVER-ST. LOUIS AREA

STATION LOCATION MISSISSIPPI RIVER AT

EAST ST. LOUIS, ILLINOIS 24

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	600	0	0	60	0	0	0	390	120	190	170	69	1																		
10	16	61	2400	0	40	100	0	270	20	1700	250	540	190																				
10	23	61	2100	20	0	380	180	270	50	1160	50	1070	180	71	3	69	2	50	1	57	1	38	1										
11	6	61	5000	0	0	170	0	150	20	3910	730	500	310	71	4	68	3	69	3	88	1												
11	20	61	4300	0	0	80	0	40	0	3870	330	190	100	71	5	69	2																
12	4	61	100	0	0	0	0	0	20	100	20	20	0																				
12	18	61	8200	0	0	170	0	250	0	7600	190	750	20	71	6	51	1																
1	8	62	9300	50	20	200	0	770	140	7700	450	1190	0	71	6	68	3	51	3	69	2	67	1										
1	15	62	3000	0	40	20	0	110	0	2680	110	250	130	71	3																		
2	5	62	1100	0	20	0	0	70	20	650	340	140	90	71	2	88	1																
2	19	62	500	0	0	0	0	50	70	160	250	50	20																				
3	5	62	2100	0	0	40	0	120	40	1640	230	120	20	71	3	68	1																
3	19	62	1500	0	0	80	0	420	80	500	410	120	150	71	2	51	1	57	1														
4	2	62	900	0	0	0	0	0	60	440	410	210	80	69	1	71	1																
4	16	62	4400	20	80	230	20	730	600	2090	660	480	120	71	4	51	2	69	2	63	2	62	1	88	1	68	1						
5	7	62	10000	60	130	990	910	60	150	6440	1250	5060	990	71	6	50	3	24	3	92	2	38	2	69	1	88	1	91	1				
5	21	62	9500	0	0	580	390	290	60	4640	3560	2380	410	71	5	88	4	92	4	69	2	68	2	50	2	38	2	82	1	87	1		
6	4	62	3500	0	0	230	20	60	20	1840	1370	770	170	71	4	88	3	92	2	69	1												
6	18	62	4200	0	20	410	40	270	120	2480	870	1240	310	71	4	69	2	88	2	68	1	38	1										
7	2	62	3800	40	0	290	20	80	40	2770	520	580	120	67	4	69	1	88	1														
7	16	62	2300	0	0	190	0	60	40	1330	700	210	250	67	3	88	2	69	2														
8	7	62	1800	0	0	230	0	120	0	1160	330	370	40	68	2	69	1	71	1	67	1												
8	20	62	7900	410	0	850	0	1180	60	4060	1330	910	290	71	4	68	4	51	3	92	3	69	3	2	2	88	2	67	1	38	1		
9	4	62	14400	390	0	990	80	330	210	10970	1450	1410	410	71	5	68	5	69	5	92	3	88	2	51	1	32	1	3	1	63	1	2	1
9	17	62	2500	80	40	190	0	0	0	1780	410	1080	170	71	3	69	3	68	2	87	1												

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ILLINOIS

MAJOR BASIN UPPER MISSISSIPPI RIVER

MINOR BASIN MISSISSIPPI RIVER-ST. LOUIS AREA

STATION LOCATION MISSISSIPPI RIVER AT

EAST ST. LOUIS, ILLINOIS 024

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA								
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
10	2	61	56	43	58	35	83	6	26	4	12	0	0	7											7	75	1	76	1			0	0
10	16	61	58	44	56	38	83	16		1	1	0	0	8	11	2									0							0	0
10	23	61	56	30	83	27	58	27	26	5	11	50	0	2											7	77	1	76	1			1	0
11	6	61	56	30	83	13	58	11	80	11	35	0	0	4											1							0	0
11	20	61	83	63	56	25	80	3	47	2	7	0	0	1											0							0	0
12	4	61	82	55	80	13	83	5	57	3	24	0	0	23	11	2	2	1							1							0	0
12	18	61	80	78	83	9	71	3	82	2	8	0	0	9	11	1									4							1	0
1	8	62	80	23	83	18	70	8	56	8	43	50	10	13	21	1									2							0	0
1	15	62	80	53	26	5	92	5	95	4	33	110	0	10											4	50	1					0	0
2	5	62	71	21	80	18	83	15	56	6	40	50	0	0											0							0	0
2	19	62										90	0	0											1							0	0
3	5	62	83	24	71	15	92	12	26	10	39	20	0	0											0							0	0
3	19	62	92	9	62	9	36	8	56	6	68	80	0	0											0							0	0
4	2	62	83	20	56	19	26	13	58	7	41	0	0	3											1							0	0
4	16	62	56	28	80	11	82	10	26	9	42	20	0	7	11	1									0							0	0
5	7	62	82	68	56	14	92	4	80	4	10	20	0	46	2	3	11	2							16	76	3					0	4
5	21	62	56	38	80	12	58	12	83	7	31	0	0	0											0							0	0
6	4	62	80	23	56	21	71	18	92	10	28	0	0	0											0							0	0
6	18	62	83	41	56	14	80	11	58	10	24	20	0	0											5	76	1					0	0
7	2	62	20	75	56	10	58	8	26	2	5	0	0	0											1							0	0
7	16	62	20	61	58	10	56	9	26	9	11	0	0	0											3							0	0
8	7	62	56	42	26	19	58	16	20	9	14	0	0	105	17	4	16	2	11	1	2	1			19	77	3	51	1	76	1	3	0
8	20	62	82	29	26	18	56	18	58	6	29	0	0	246	2	6	17	3	11	2	3	1	18	1	3	76	1					0	0
9	4	62	82	27	26	27	58	19	56	9	18	0	0	396	2	6	22	4	17	4	11	3	15	1	28	50	3	51	2	76	2	0	0
9	17	62	82	34	26	23	58	17	56	11	15	20	0	61	17	3	11	3	2	1					12	76	2	50	1	77	1	0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI RIVER-ST. LOUIS AREA
STATION LOCATION MISSISSIPPI RIVER AT
EAST ST. LOUIS, ILLINOIS 24

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END						ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL			TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS				
10	2	61	10	12	4198	201	50	151	1	10	20	1	1	16	2	8	4	1	6
11	7	61	11	18	2765	298	84	214	3	20	25	2	2	20	1	9	7	3	17
12	11	61	12	20	3531	205	41	164	0	7	23	3	3	15	2	5	2	1	3
1	8	62	1	18	3792	246	79	167	2	18	31	4	4	20	3	9	6	1	12
2	5	62	2	16	4899	163	64	99	3	13	22	2	2	17	1	8	6	1	11
3	5	62	3	16	4857	165	41	124	1	7	17	1	1	15	0	5	3	1	7
4	2	62	4	12	3782	156	58	98	2	15	20	2	1	16	1	7	6	1	7
5	1	62	5	8	1815#	439	148	291	4	36	40	5	2	32	1	21	16	3	28
6	4	62	6	12	4717	147	57	90	1	17	13	1	1	11	0	7	6	1	12
7	5	62	7	14	5218	141	67	74	3	15	18	1	1	15	1	8	7	1	15
8	6	62	8	13	3635	229	91	138	2	25	21	1	1	17	2	11	10	2	20
9	4	62	9	13	3636	164	42	122	0	11	9	1	1	7	0	4	3	1	14

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI RIVER-ST. LOUIS AREA
STATION LOCATIONMISSISSIPPI RIVER AT
EAST ST. LOUIS, ILLINOIS 24

DATE OF SAMPLE MONTH	DAY	YEAR	TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND 1-HOUR mg/l	CHLORINE DEMAND 24-HOUR mg/l	AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
10	2	61	18.2	8.6	7.5	3.4	-	-	-	.1	12	98	130	30	350	51	.3	206	20000
10	9	61	17.7	8.9	7.7	4.9	-	-	-	.1	14	140	192	25	250	73	.3	240	10000
10	13	61	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-	-
10	16	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2400
10	23	61	16.1	8.6	7.9	3.8	-	-	-	.1	16	166	228	23	150	73	.3	220	9000
10	30	61	14.8	9.2	8.0	4.0	-	-	-	.1	17	176	236	20	100	78	.3	224	11000
11	6	61	12.6	8.9	7.6	6.2	-	-	-	.1	14	128	166	29	650	48	.4	198	11000
11	13	61	9.9	10.8	7.8	4.6	-	-	-	.1	15	156	220	20	400	70	.3	210	8000
11	20	61	-	-	-	-	33	-	-	-	-	-	-	-	-	-	-	-	16000
11	27	61	8.9	10.0	7.8	5.6	-	-	-	.1	12	136	188	24	600	50	-	201	6000
12	4	61	6.7	11.9	7.7	4.0	-	-	-	.1	16	168	252	20	50	60	.2	248	900
12	11	61	5.0	12.6	7.9	4.3	-	-	-	.1	17	188	280	18	100	66	-	260	3300
12	21	61	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-	-
1	8	62	1.1	14.3	7.8	4.4	-	-	-	.6	16	196	248	17	50	73	.4	303	2700
1	15	62	1.1	14.0	7.8	4.0	-	-	-	.7	16	180	234	2	50	56	-	296	8700
1	18	62	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-
1	22	62	.6	13.5	7.7	4.6	-	-	-	.8	19	200	260	26	50	78	.4	301	2400
1	29	62	1.1	13.0	7.8	5.4	-	-	-	.7	19	180	240	26	80	78	.3	285	3300
2	5	62	1.1	12.0	7.7	5.6	-	-	-	.9	19	156	220	20	100	73	.3	290	1100
2	12	62	1.1	11.5	7.6	6.4	-	-	-	.8	16	140	204	20	250	62	.2	250	1000
2	16	62	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-
2	19	62	3.3	12.5	7.7	4.5	-	-	-	.8	18	160	212	20	200	68	-	298	2500
2	26	62	2.8	13.5	7.6	5.5	-	-	-	.8	17	152	220	19	175	68	-	280	4200
3	5	62	1.7	13.8	7.8	5.0	-	-	-	.8	16	168	236	20	175	62	.2	298	1900
3	12	62	2.8	13.0	8.0	6.0	-	-	-	.8	18	176	248	20	150	76	.2	300	5700
3	15	62	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-	-
3	19	62	2.8	12.9	7.8	7.3	-	-	-	.7	14	132	180	24	450	53	.3	220	2000
3	26	62	5.0	11.5	7.5	5.7	-	-	-	.6	12	96	132	21	650	37	-	198	*100
4	2	62	7.8	10.9	7.6	5.2	-	-	-	-	12	124	172	22	175	50	.3	186	1100
4	9	62	8.3	10.2	7.6	5.4	-	-	-	.5	12	124	180	20	200	48	-	216	2500
4	13	62	-	-	-	-	37	-	-	-	-	-	-	-	-	-	-	-	-
4	16	62	8.3	10.8	7.8	3.4	-	-	-	.3	14	140	196	25	175	50	.4	226	1400
4	23	62	11.5	10.0	7.7	3.2	-	-	-	.2	15	142	204	23	175	52	.4	228	1300
4	30	62	16.6	9.0	7.9	3.9	-	-	-	.1	15	144	204	25	175	63	-	222	2200
5	7	62	18.8	9.1	7.8	4.8	-	-	-	.1	15	166	220	24	200	71	.4	-	2000
5	14	62	19.9	8.8	7.9	5.4	-	-	-	.1	13	144	188	21	900	65	.3	-	3000
5	11	62	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-
5	21	62	22.7	7.6	7.7	5.0	-	-	-	.1	15	164	216	21	400	70	.4	232	1300
5	28	62	23.8	7.4	7.9	4.6	-	-	-	.1	16	168	224	19	200	70	[illegible]	230	4300

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ILLINOIS
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI RIVER-ST. LOUIS AREA
STATION LOCATION MISSISSIPPI RIVER AT
EAST ST. LOUIS, ILLINOIS 24

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	4	62	22.2	5.1	7.8	4.0	-	-	-	.1	12	140	164	26	800	51	.2	194	10000
6	11	62	23.8	5.0	7.9	3.0	-	-	-	.1	11	136	160	29	800	48	.3	196	9000
6	13	62	-	-	-	-	27	-	-	-	-	-	-	-	-	-	-	-	-
6	18	62	24.4	7.6	8.0	5.3	-	-	-	.1	12	148	196	29	400	55	.2	298	4700
6	25	62	26.2	7.7	7.9	6.0	-	-	-	.1	15	160	212	32	250	64	-	304	3000
7	2	62	28.2	7.3	7.8	6.0	-	-	-	.1	16	160	212	29	150	68	-	310	3700
7	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5000
7	11	62	27.7	6.8	7.6	4.2	-	-	-	.1	12	136	184	30	700	54	-	194	-
7	16	62	28.8	7.0	8.0	5.1	-	-	-	.1	15	158	212	28	200	62	.2	235	4700
7	17	62	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-
7	23	62	27.7	6.2	7.8	4.9	-	-	-	.1	14	156	208	26	150	55	.3	210	4500
7	30	62	26.2	7.1	8.0	5.4	-	-	-	.1	15	164	224	26	200	55	.3	-	5900
8	7	62	26.8	7.6	7.8	5.4	-	-	-	.1	15	162	216	26	150	63	.4	312	4000
8	13	62	26.8	6.0	8.0	4.5	-	-	-	.1	16	170	236	22	150	60	-	334	13000
8	15	62	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-
8	20	62	26.8	-	8.2	-	-	-	-	.1	17	178	244	29	80	71	-	322	74000
8	27	62	26.8	7.7	8.4	3.2	-	-	-	.1	18	172	248	26	80	78	.4	330	49000
9	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8500
9	4	62	26.2	-	8.2	-	-	-	-	.1	16	174	256	30	100	74	.4	310	-
9	10	62	23.3	-	8.0	-	-	-	-	.1	16	172	232	30	200	64	.4	317	8500
9	16	62	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-	-
9	17	62	23.8	6.2	7.8	4.2	-	-	-	-	14	160	204	25	100	52	.3	-	3100
9	24	62	21.0	7.1	8.0	2.0	-	-	-	.1	16	164	212	24	100	56	.4	332	500

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Alton, Illinois
Operated by U.S. Geological Survey

STATE Illinois

MAJOR BASIN Upper Mississippi River

MINOR BASIN Mississippi River-St. Louis Area

STATION LOCATION Mississippi River at
East St. Louis, Illinois

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	94.600	136.000	112.000	65.700	85.100	70.400	296.000	221.000	169.000	80.100	90.800	52.000
2	115.000	138.000	113.000	61.800	83.100	83.500	298.000	211.000	180.000	75.300	91.800	63.100
3	134.000	154.000	106.000	64.400	83.600	89.400	298.000	203.000	185.000	83.300	84.800	71.300
4	132.000	173.000	104.000	71.100	88.300	95.000	300.000	193.000	190.000	108.000	83.200	78.900
5	132.000	189.000	94.800	75.900	101.000	85.300	307.000	185.000	197.000	124.000	82.700	73.900
6	120.000	199.000	101.000	80.500	102.000	82.800	314.000	176.000	188.000	124.000	93.300	78.600
7	116.000	203.000	98.600	74.600	122.000	81.800	319.000	168.000	176.000	114.000	79.900	97.000
8	116.000	191.000	95.200	74.600	119.000	84.000	324.000	168.000	177.000	106.000	72.900	101.000
9	97.300	156.000	90.100	63.700	140.000	89.800	331.000	168.000	190.000	98.900	71.400	110.000
10	90.000	134.000	86.600	62.200	146.000	95.300	335.000	174.000	196.000	98.900	73.800	108.000
11	97.700	118.000	81.000	68.600	120.000	92.800	334.000	190.000	199.000	96.600	68.900	99.900
12	93.100	118.000	78.700	72.100	110.000	115.000	333.000	201.000	193.000	91.900	64.300	106.000
13	88.400	121.000	66.100	69.300	104.000	163.000	326.000	196.000	185.000	88.500	58.800	103.000
14	93.600	130.000	53.000	65.200	103.000	177.000	316.000	186.000	191.000	91.900	57.800	77.800
15	100.000	123.000	53.000	66.600	107.000	175.000	303.000	181.000	195.000	93.200	59.900	75.700
16	104.000	117.000	55.500	60.500	121.000	168.000	291.000	179.000	193.000	113.000	67.300	81.600
17	107.000	144.000	62.600	62.600	122.000	155.000	281.000	177.000	181.000	121.000	61.200	82.500
18	99.100	187.000	63.400	63.900	132.000	152.000	268.000	175.000	159.000	120.000	60.500	80.100
19	75.400	204.000	71.700	62.900	127.000	156.000	259.000	171.000	145.000	113.000	55.700	77.200
20	60.400	213.000	73.000	62.200	120.000	174.000	250.000	159.000	136.000	111.000	61.300	76.800
21	71.000	224.000	67.500	60.800	111.000	225.000	243.000	151.000	122.000	124.000	59.900	76.800
22	67.200	229.000	72.300	58.100	110.000	241.000	241.000	144.000	112.000	131.000	58.800	77.300
23	70.500	225.000	80.500	58.300	108.000	279.000	239.000	141.000	107.000	120.000	53.800	74.800
24	72.300	207.000	77.200	59.400	104.000	305.000	234.000	138.000	102.000	123.000	56.200	77.300
25	71.700	177.000	79.600	60.000	94.000	324.000	230.000	138.000	98.400	130.000	52.400	79.000
26	67.300	156.000	82.300	59.200	104.000	336.000	230.000	140.000	97.000	131.000	44.800	76.800
27	57.000	154.000	85.500	69.000	106.000	333.000	227.000	143.000	99.900	123.000	48.300	73.100
28	63.800	145.000	75.600	73.500	90.400	325.000	226.000	147.000	91.000	116.000	58.000	70.300
29	62.200	134.000	55.800	73.600		317.000	226.000	149.000	76.200	110.000	63.000	68.600
30	85.400	126.000	60.200	82.900		303.000	224.000	144.000	78.300	110.000	57.200	58.900
31	112.000		72.900	89.200		297.000		149.000		99.300	51.600	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE IOWA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-DES MOINES-SKUNK RIVERS
STATION LOCATION MISSISSIPPI RIVER AT
BURLINGTON, IOWA 25

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	16	1	1	1	2	2	2	4	5	23	6	27	8						
10	9	61	10	24	-	-	-	-	-	-	1	6	9	7	10	9						
10	16	61	10	25	-	-	-	-	-	-	12	7	28	8	40	11						
10	23	61	11	2	-	-	-	-	-	-	17	7	20	8	37	11						
10	30	61	11	7	-	-	-	-	-	-	113	10	25	8	138	13						
11	6	61	11	16	6	5	0	1	6	5	68	12	41	8	109	14						
11	20	61	12	4	-	-	-	-	-	-	21	7	34	8	55	11						
11	27	61	12	6	-	-	-	-	-	-	34	7	30	8	64	11						
12	4	61	12	14	4	3	0	1	4	3	15	7	17	6	32	9						
12	11	61	12	19	-	-	-	-	-	-	12	6	15	8	27	10						
12	18	61	1	3	-	-	-	-	-	-	6	5	17	8	23	9						
1	2	62	1	15	0	0	2	1	2	1	3	4	11	6	13	7						
1	15	62	2	6	-	-	-	-	-	-	3	5	16	7	19	9						
1	22	62	2	1	-	-	-	-	-	-	3	5	25	8	28	9						
1	29	62	2	8	-	-	-	-	-	-	1	8	8	10	9	13						
2	5	62	2	15	1	1	1	2	2	2	36	6	23	6	59	8						
2	19	62	3	2	-	-	-	-	-	-	7	5	12	8	19	9						
2	26	62	3	9	-	-	-	-	-	-	17	5	21	8	38	9						
3	5	62	3	16	0	1	1	1	1	1	8	4	14	6	22	7						
3	12	62	3	23	-	-	-	-	-	-	43	7	30	8	73	11						
3	26	62	3	26	-	-	-	-	-	-	200	17	30	5	230	18						
4	2	62	4	13	9	6	0	1	9	6	95	15	35	6	130	16						
4	9	62	4	24	-	-	-	-	-	-	46	12	58	14	104	18						
4	16	62	4	30	-	-	-	-	-	-	34	8	18	7	52	11						
4	23	62	5	22	-	-	-	-	-	-	19	7	34	9	53	12						
4	30	62	6	1	-	-	-	-	-	-	15	6	25	7	40	9						
5	7	62	6	8	0	1	1	1	1	1	25	6	19	7	44	9						
5	14	62	7	25	-	-	-	-	-	-	45	8	65	9	110	12						
5	21	62	6	26	-	-	-	-	-	-	22	7	35	8	57	11						
5	28	62	6	29	-	-	-	-	-	-	56	6	30	4	86	7						
6	4	62	7	3	1	3	0	1	1	3	24	28	34	7	58	29						
6	11	62	7	10	-	-	-	-	-	-	18	7	35	8	53	11						
6	18	62	7	17	-	-	-	-	-	-	3	10	32	8	35	13						
6	25	62	7	18	-	-	-	-	-	-	648	41	75	9	723	42						
7	2	62	7	24	0	0	0	1	0	1	10	6	31	8	41	10						
7	9	62	8	17	-	-	-	-	-	-	0	5	29	8	29	9						
7	16	62	8	14	-	-	-	-	-	-	91	13	50	8	141	15						
7	23	62	8	15	-	-	-	-	-	-	14	7	32	9	46	11						
7	30	62	8	22	-	-	-	-	-	-	31	7	34	7	65	10						
8	6	62	8	28	0	0	0	1	0	1	6	5	25	8	31	9						
8	13	62	8	30	-	-	-	-	-	-	5	27	6	5	11	27						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE IOWA

MAJOR BASIN UPPER MISSISSIPPI RIVER

MINOR BAS'N MISSISSIPPI-DES MOINES-SKUNK RIVERS

STATION LOCATION MISSISSIPPI RIVER AT

BURLINGTON, IOWA 25

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
8	20	62	9	5	-	-	-	-	-	-	6	5	33	9	39	10						
8	27	62	9	14	-	-	-	-	-	-	8	13	21	10	29	16						
9	4	62	9	21	0	1	2	1	2	1	7	7	28	9	35	11						
9	10	62	10	9	-	-	-	-	-	-	37	13	33	8	70	15						
9	17	62	10	10	-	-	-	-	-	-	15	12	27	8	42	14						
9	24	62	10	18	-	-	-	-	-	-	18	7	25	8	43	11						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IOWA

MAJOR BASIN UPPER MISSISSIPPI RIVER

MINOR BASIN MISSISSIPPI-DES MOINES-SKUNK RIVERS

STATION LOCATION MISSISSIPPI RIVER AT
BURLINGION, IOWA 25

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	2700	160	0	1970	0	20	0	90	470	200	600	38	7	87	1	78	1														
10	16	61	5500	20	0	370	0	190	20	4390	520	1430	170	71	5	69	3	68	2	92	1	87	1	38	1								
11	6	61	5900	0	0	170	0	100	0	4760	830	700	660	71	5	69	3	92	1	68	1	38	1										
11	20	61	1600	0	40	20	0	0	0	1300	250	310	60	71	7																		
12	4	61	6000	20	110	430	0	230	20	4910	270	1460	320	71	5	69	1																
12	18	61	9100	0	50	450	0	220	160	8130	130	800	90	71	6	60	1																
1	2	62	2700	110	0	50	0	270	50	2180	0	70	0	71	4	51	1																
1	15	62	400	0	0	0	0	40	40	270	20	40	0	71	1																		
2	5	62	700	0	0	20	0	20	20	270	340	70	510	71	1																		
2	19	62	1800	0	0	20	0	70	160	1450	70	0	20	71	4																		
3	5	62	1000	110	20	20	0	380	130	340	20	70	20	71	2	51	1																
3	19	62	500	0	0	20	0	40	0	250	210	100	120																				
4	2	62	2600	0	0	20	0	60	20	1450	1010	600	210	69	3	71	3	84	2	68	1												
4	16	62	8900	2750	0	410	0	90	50	5110	470	2080	630	71	5	2	5	69	2	68	2												
5	7	62	33500	40	0	2360	*	500	170	26410	2570	7830	120	71	8	69	4	50	4	92	4	25	3	38	3	71	2	68	2	51	2	24	2
5	21	62	23700	120	170	2400	950	410	80	13830	5710	4800	620	69	4	77	4	50	3	24	3	38	3	25	2	51	1	16	1	32	1		
6	4	62	3300	0	40	220	0	70	130	2480	310	1540	360	71	5																		
6	18	62	9400	170	0	870	660	250	170	6330	990	2240	120	71	5	69	4	50	3	88	2	68	2	51	1	25	1	91	1	3	1		
7	2	62	5600	230	0	700	60	410	190	3460	540	1990	350	71	4	69	3	68	2	51	2	92	1	3	1								
7	16	62	7600	40	0	0	80	110	0	6120	1250	3250	590	71	5	68	4	69	4	86	3	88	2	67	1	38	1						
8	6	62	4000	250	0	720	100	460	20	2240	250	1740	120	68	3	69	3	71	2	35	1	38	1	51	1	25	1	92	1				
8	20	62	7500	230	0	790	80	520	60	4580	1200	1280	120	68	4	71	4	88	3	69	2	51	2	92	2	35	1	38	1	24	1		
9	4	62	7900	440	40	930	0	600	120	4430	1330	1900	660	71	4	68	3	92	3	38	2	51	2	5	1	88	1	24	1				
9	17	62	7500	270	0	640	140	210	40	5420	790	2070	210	68	5	71	4	69	4	92	2	38	2	51	1								
*5	7	62					1490																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IOWA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-DES MOINES-SKUNK RIVERS
STATION LOCATION MISSISSIPPI RIVER AT
BURLINGTON, IOWA 025

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTE Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	56	57	58	36	26	4	83	2	1	20	0	14	11	1									2							0	0
10	16	61	56	60	83	21	58	12	45	3	4	0	0	4											0							0	0
11	6	61	56	56	83	16	58	10	92	2	16	0	0	0											0							0	0
11	20	61	82	35	80	26	26	6	83	3	30	0	0	0											0							0	0
12	4	61	80	74	56	12	83	4	82	2	8	180	0	12	2	1									0							0	0
12	18	61	80	90	82	2	57	2	89	2	4	0	20	65	21	4	11	2							2							0	0
1	2	62	80	63	82	15	89	8	56	4	10	90	20	53	21	3	2	2	11	1					3							0	0
1	15	62	80	36	82	27	56	6	9	5	26	0	10	59	2	3	11	2	21	1	17	1			4	50	1					0	1
2	5	62	71	47	92	6	86	6	72	6	35	50	0	0											0							0	0
2	19	62	82	52	80	13	56	4	88	4	27	0	10	6											2							1	0
3	5	62	82	44	51	8	56	6	92	6	36	40	0	4											0							0	0
3	19	62	80	31	83	9	71	8	26	7	45	40	0	0											0							0	0
4	2	62	56	33	47	22	80	11	71	8	26	40	0	1											2							1	0
4	16	62	56	35	80	23	83	16	58	5	21	20	0	0											0							0	0
5	7	62	82	50	56	34	92	7	80	3	6	0	0	215	2	5	11	3	46	2	21	2			16	76	2	50	1			0	0
5	21	62	56	57	58	14	80	14	45	4	11	0	0	204	2	5	11	4							61	76	4	51	4	50	1	0	1
6	4	62	80	43	56	38	58	5	61	4	10	0	0	57	2	3	11	2	22	1					11	76	1					0	0
6	18	62	56	49	80	15	58	10	82	8	18	40	0	101	22	4	11	3	2	2	17	1	18	1	2							0	0
7	2	62	80	42	56	27	26	13	58	11	7	20	0	33	11	3									4							0	0
7	16	62	56	38	58	25	26	9	53	8	20	40	0	0											0							0	0
8	6	62	26	36	58	21	56	18	80	7	18	0	10	138	11	4	22	3	18	3	2	2	17	1	0							0	0
8	20	62	26	34	82	23	58	14	56	8	21	0	0	418	11	6	17	4	2	4	22	4	16	2	0							0	0
9	4	62	58	40	56	23	26	10	82	9	18	0	0	189	11	5	17	3	22	3	2	3	15	1	0							0	0
9	17	62	56	25	26	25	58	20	82	17	13	0	0	52	11	3	2	1	15	1					0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE IOWA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-DES MOINES-SKUNK RIVERS
STATION LOCATION MISSISSIPPI RIVER AT
BURLINGTON, IOWA 25

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END			TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY							TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS				
10	2	61	10	9	4830	137	38	99	1	9	12	1	1	9	1	5	2	1	8
11	6	61	11	14	5005	130	34	96	0	9	11	2	1	6	2	4	2	1	7
12	4	61	12	12	5000	142	30	112	1	8	10	1	1	8	0	3	1	1	6
1	1	62	1	8	4860	175	46	129	0	14	11	1	1	9	0	5	3	1	12
2	5	62	2	14	5000	210	57	153	2	14	16	1	1	12	2	6	5	2	12
3	5	62	3	13	4980	200	62	138	7	13	16	1	2	11	2	6	6	1	13
4	2	62	4	9	5000	140	48	92	1	11	17	1	1	13	2	7	4	1	7
5	7	62	5	16	5000	155	77	78	2	23	19	2	1	15	1	8	8	2	15
6	5	62	6	12	5000	137	59	78	1	15	15	1	1	12	1	7	6	1	14
7	2	62	7	9	5010	119	40	79	1	11	10	1	1	7	1	4	4	1	9
8	6	62	8	16	4840	156	48	108	1	11	14	2	1	10	1	5	3	1	13
9	3	62	9	11	2900	251	45	206	1	12	17	1	1	14	1	6	3	1	5

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE IOWA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-DES MOINES SKUNK RIVERS
STATION LOCATION MISSISSIPPI RIVER AT
BURLINGTON, IOWA 25

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	9	61	-	-	-	-	40	-	-	-	-	-	-	-	-	-	-	-	-
11	14	61	-	-	-	-	27	-	-	-	-	-	-	-	-	-	-	-	-
12	13	61	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-
1	8	62	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-
2	15	62	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-
3	13	62	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-	-
4	12	62	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-
6	12	62	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-
8	16	62	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Keokuk, Iowa
Operated by U.S. Geological Survey

STATE	Iowa
MAJOR BASIN	Upper Mississippi River
MINOR BASIN	Mississippi-Des Moines-Skunk Rivers
STATION LOCATION	Mississippi River at Burlington, Iowa

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	47.700	83.700	70.200	41.100	36.300	39.000	191.000	138.000	142.000	59.200	71.700	49.200
2	59.000	84.600	70.700	42.300	36.200	38.200	202.000	132.000	150.000	57.200	71.600	58.000
3	68.300	93.500	65.800	42.200	36.000	37.600	207.000	128.000	142.000	59.000	67.200	61.200
4	59.700	119.000	66.900	41.900	35.800	36.100	210.000	124.000	135.000	69.000	64.800	61.200
5	57.900	132.000	67.300	41.800	40.500	37.900	214.000	117.000	127.000	75.600	62.000	69.600
6	60.400	137.000	64.700	41.300	49.000	38.500	221.000	119.000	129.000	71.100	60.700	70.800
7	55.800	126.000	62.000	45.000	46.700	38.900	224.000	116.000	130.000	61.500	60.000	74.100
8	48.300	104.000	57.600	46.400	45.400	39.400	222.000	122.000	131.000	62.000	59.100	74.000
9	46.300	90.600	56.400	46.900	42.900	39.700	214.000	134.000	133.000	61.800	57.300	71.700
10	48.000	90.200	56.500	46.500	40.600	39.400	206.000	138.000	132.000	58.800	53.900	73.400
11	42.000	90.600	51.400	42.300	37.600	49.800	196.000	135.000	136.000	59.700	49.700	78.900
12	46.500	89.700	43.600	41.900	39.300	72.000	187.000	137.000	133.000	63.000	45.500	72.000
13	49.100	88.000	27.600	40.300	40.400	80.500	182.000	134.000	130.000	61.100	46.700	64.500
14	53.800	83.000	28.000	37.400	43.600	81.800	178.000	132.000	126.000	66.600	45.600	62.600
15	59.400	76.500	34.700	39.400	48.400	81.800	177.000	130.000	118.000	79.000	45.100	63.200
16	69.500	92.000	34.100	39.500	51.200	79.400	175.000	128.000	112.000	84.500	46.000	65.000
17	57.100	122.000	37.000	38.000	52.400	81.300	176.000	124.000	106.000	85.700	45.700	64.000
18	45.200	142.000	39.400	37.300	50.200	83.000	178.000	114.000	100.000	74.500	45.300	63.000
19	43.100	153.000	42.100	36.800	47.400	103.000	180.000	108.000	94.600	74.000	44.500	64.300
20	45.200	147.000	42.300	35.800	45.400	120.000	180.000	106.000	91.200	78.000	45.200	64.900
21	44.900	133.000	47.400	35.500	44.900	160.000	180.000	102.000	85.700	78.000	42.700	64.000
22	49.900	118.000	51.800	34.500	43.100	178.000	182.000	99.300	79.800	83.300	41.800	62.700
23	49.600	108.000	52.000	34.400	43.800	197.000	180.000	96.100	74.800	91.900	40.100	62.900
24	48.000	104.000	54.500	33.700	43.000	195.000	176.000	98.700	75.200	92.500	36.800	64.500
25	45.700	101.000	54.500	34.300	41.200	180.000	173.000	106.000	79.000	90.200	35.500	67.200
26	43.300	97.300	52.900	34.400	40.900	170.000	168.000	109.000	77.000	84.300	40.200	62.800
27	41.700	90.100	52.500	35.400	40.300	167.000	161.000	110.000	71.000	81.400	47.500	62.600
28	41.000	82.500	51.800	36.100	40.000	167.000	156.000	104.000	65.600	81.500	54.300	55.000
29	45.000	72.900	50.800	37.200		172.000	149.000	104.000	63.600	77.700	47.800	46.500
30	60.200	73.800	46.500	36.300		175.000	141.000	116.000	62.500	74.200	40.300	42.300
31	75.800		44.100	36.400		179.000		127.000		76.500	41.200	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE IOWA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-WAPSIPINICON & TRIB.
STATION LOCATION MISSISSIPPI RIVER AT
DUBUQUE, IOWA 26

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	23	61	11	2	-	-	-	-	-	-	4	5	19	7	23	9						
10	31	61	11	9	-	-	-	-	-	-	27	8	27	7	54	11						
11	20	61	12	4	-	-	-	-	-	-	31	6	36	7	67	9						
12	4	61	12	18	-	-	-	-	-	-	14	6	25	7	39	9						
12	26	61	1	9	0	0	2	1	2	1	6	4	19	6	25	7						
1	2	62	1	12	-	-	-	-	-	-	0	5	27	7	27	9						
1	16	62	1	29	0	1	0	1	0	1	5	4	13	6	18	7						
1	22	62	1	31	-	-	-	-	-	-	1	5	6	7	7	9						
2	19	62	3	5	0	1	1	1	1	1	7	4	17	6	24	7						
3	5	62	3	16	-	-	-	-	-	-	13	4	25	6	38	7						
3	12	62	3	26	0	1	1	1	1	1	3	4	19	6	22	7						
3	19	62	4	4	-	-	-	-	-	-	17	6	27	8	44	10						
3	26	62	4	9	-	-	-	-	-	-	75	7	38	6	113	9						
4	2	62	4	16	-	-	-	-	-	-	58	7	27	5	85	9						
4	9	62	4	23	2	2	0	0	2	2	31	10	17	5	48	11						
4	23	62	5	22	-	-	-	-	-	-	14	8	28	9	42	12						
5	7	62	6	18	-	-	-	-	-	-	80	16	41	7	121	17						
5	14	62	6	19	0	1	1	2	1	2	26	6	48	8	74	10						
5	21	62	6	27	-	-	-	-	-	-	9	6	26	8	35	10						
5	29	62	7	2	-	-	-	-	-	-	53	16	37	8	90	18						
6	4	62	6	4	-	-	-	-	-	-	4	5	38	8	42	9						
6	25	62	7	31	0	1	0	1	0	1	1	6	37	9	38	11						
9	18	62	10	10	0	1	1	1	1	1	10	6	21	8	31	10						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IOWA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-WAPSIPINICON & TRIB.
STATION LOCATION MISSISSIPPI RIVER AT
DUBUQUE, IOWA 26

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	23	61	9100	20	250	330	0	130	20	7850	520	890	100	71	6	69	4	87	1	12	1												
10	31	61	6700	0	270	430	0	360	130	5360	180	1230	90	71	6	57	1	12	1														
11	20	61	8100	160	270	1080	0	500	180	5420	500	2720	340	71	5	69	3	57	2	35	1	38	1	2	1	60	1	51	1	24	1		
12	4	61	3800	0	160	360	0	520	200	2410	160	2030	140	71	4	51	1	57	1	63	1												
12	26	61	500	20	0	20	0	20	0	390	20	230	0	71	1																		
1	2	62	900	20	0	70	0	140	0	410	230	340	0	71	2																		
1	16	62	200	0	0	0	0	40	0	80	40	40	0																				
2	19	62	2600	0	0	0	0	90	50	2400	90	70	0	71	4																		
3	5	62	200	0	0	0	0	0	0	130	70	90	50																				
3	19	62	300	0	0	20	0	0	0	70	200	0	20																				
3	19	62	400	20	0	20	0	0	0	230	80	60	0																				
4	2	62	2200	0	20	20	0	40	0	1300	790	370	80	69	3	71	2	88	1	92	1												
4	16	62	7900	50	0	230	0	140	410	6240	830	2710	920	71	6	69	3	65	2	68	1	98	1	92	1								
5	7	62	19600	0	0	720	170	40	0	16210	2470	2700	970	71	7	92	3	69	3	38	2	93	2	77	2	88	1	50	1				
5	21	62	19800	630	510	2490	340	760	0	11440	3630	3930	1390	71	6	69	5	82	4	38	3	87	3	57	3	2	2	92	2	17	2	34	2
6	4	62	7100	60	40	350	40	310	100	5130	1080	540	170	71	5	69	4	88	2	77	2	51	1										
6	25	62	18900	580	80	1990	*	1700	110	10390	1200	1530	370	71	6	50	5	51	4	69	3	68	3	92	3	40	2	38	2	3	1	30	1
7	2	62	2200	20	50	450	20	50	50	1470	110	630	110	71	3	69	2																
7	23	62	3000	80	0	490	130	0	40	1560	720	1060	630	71	3	69	2	88	2	40	1	68	1	38	1								
8	6	62	3700	110	0	410	210	420	120	1680	790	620	370	68	3	69	2	88	1	92	1	51	1	50	1	87	1	38	1				
8	20	62	4700	60	500	290	60	190	120	3400	120	580	120	71	4	69	4	12	2	68	1												
9	4	62	4400	0	0	530	0	80	0	2410	1390	1770	970	71	3	69	3	87	2	68	2	92	1	40	1	88	1	79	1				
9	18	62	1000	10	40	210	0	30	0	620	80	640	200	71	2	68	1																
*6	25	62					2860																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IOWA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-WAPSIPINICON & TRIB.
STATION LOCATION MISSISSIPPI RIVER AT
DUBUQUE, IOWA 026

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	23	61	56	46	83	24	82	12	80	11	7	20	0	369	11	6	2	5	17	3	21	1			9	51	1					0	0
10	31	61	56	45	83	33	80	12	58	3	7	0	0	305	11	6	17	4							7	77	1					0	0
11	20	61	80	56	56	28	83	7	82	3	6	90	0	0											0							0	0
12	4	61	80	49	89	3	56	3	82	2	43	50	0	60	11	3	21	2	17	1					9	50	1	76	1			0	0
12	26	61	80	51	82	15	56	5	92	4	25	0	0	38	21	2	11	2	2	1					2							0	0
1	2	62	80	54	82	15	56	6	9	5	20	20	20	82	2	4	11	2	21	2					3							0	0
1	16	62	80	28	56	17	82	12	89	7	36	0	0	18	2	1	11	1							1							0	0
2	19	62	82	42	46	4	56	3	89	3	45	2260	10	13	11	1									4	50	1					0	0
3	5	62	80	24	82	23	58	8	56	6	39	0	0	6											0							0	0
3	19	62	71	17	58	15	51	13	56	10	45	0	0	5											0							0	0
3	19	62	82	18	56	15	80	8	51	5	54	0	0	3											0							0	0
4	2	62	56	51	83	16	71	7	92	6	20	20	0	1											1							0	0
4	16	62	56	63	83	10	58	4	60	4	19	70	0	0											0							0	0
5	7	62	56	68	92	8	80	7	82	4	13	20	0	149	2	5	11	1							36	50	4	76	3			2	0
5	21	62	56	30	80	28	82	13	83	7	22	250	0	1460	11	8	2	7	17	3	46	6	21	1	114	50	4	51	4	76	4	0	0
6	4	62	56	39	80	27	83	21	58	9	4	20	10	6											4							0	0
6	25	62	56	41	80	18	82	14	58	13	14	0	10	123	22	4	11	4	17	2					58	50	4	76	4	51	2	0	0
7	2	62	56	55	58	22	80	14	26	1	8	680	0	12	11	1									11	52	2	76	1			0	0
7	23	62	56	42	58	21	80	3	82	3	31	0	0	116	11	3	22	3	2	2	17	2	15	1	6	50	2					2	0
8	6	62	58	40	56	25	80	16	26	7	12	60	0	345	11	5	22	4	17	4	18	2	2	1	12	50	2	76	2			0	0
8	20	62	58	50	56	17	80	15	83	5	13	0	0	3010	11	8	17	8	22	6	2	6	18	6	13	50	3					0	0
9	4	62	58	31	56	20	82	14	26	11	24	0	0	238	11	5	17	4	22	3	2	2	21	1	18	50	3	51	1	76	1	0	0
9	18	62	56	40	58	27	82	7	26	6	20	0	0	98	17	3	11	3	22	2	21	2			12	50	2	76	2			0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE IOWA

MAJOR BASIN UPPER MISSISSIPPI RIVER

MINOR BASIN MISSISSIPPI-WAPSIPINICON & TRIB.

STATION LOCATION MISSISSIPPI RIVER AT
DUBUQUE, IOWA 26

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END			TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY							TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS				
10	8	61	10	19	555	*	-	-	-	-	-	-	-	-	-	-	-	-	-
11	19	61	11	26	3818	186	58	128	2	16	16	1	1	13	1	7	4	1	12
12	20	61	12	27	5115	196	66	130	3	18	15	1	1	13	0	8	6	1	15
1	22	62	1	29	5595	180	43	137	2	12	11	1	1	8	1	4	3	1	10
2	15	62	2	22	2280	445	68	377	3	12	21	3	1	16	1	8	5	1	18
3	12	62	3	19	4785	211	76	135	5	18	19	2	1	16	0	9	7	2	16
4	10	62	4	16	4012	171	48	123	1	13	18	1	1	15	1	6	5	1	4
4	30	62	5	7	3923	211	103	108	4	29	26	2	1	22	1	12	4	2	26
6	4	62	6	13	2190	234	101	133	5	30	22	2	1	17	2	10	11	1	22
7	9	62	7	17	4065	202	85	117	3	22	21	1	2	17	1	11	9	2	17
8	6	62	8	13	4102	188	79	109	2	19	20	1	1	16	2	10	7	2	19
9	6	62	9	13	4642	148	57	91	1	18	13	1	1	11	0	7	5	2	11

* LOW FLOW – NOT PROCESSED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE IOWA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN MISSISSIPPI-WAPSIPINICON & TRIB.
STATION LOCATION MISSISSIPPI RIVER AT
DUBUQUE, IOWA 26

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	23	61	9.3	8.3	8.7	2.8	6	-	-	-	10	129	138	100	75	-	-	-	500
10	31	61	10.2	8.8	8.6	2.4	5	-	-	-	10	129	155	100	165	-	-	-	2400
11	20	61	4.0	10.2	8.6	2.8	-	-	-	-	9	117	152	100	180	-	-	-	-
12	4	61	5.0	10.8	8.3	2.2	4	-	-	-	8	119	169	100	160	28	.1	-	220
1	2	61	.5	10.6	7.6	1.8	3	-	-	-	8	165	185	100	25	31	.0	-	480
1	16	62	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-
1	22	62	-	-	-	-	-	-	-	-	-	-	-	-	-	34	.0	-	4
2	19	62	.9	13.8	7.8	3.4	7	-	-	-	8	134	196	20	25	-	-	-	240
3	5	62	1.2	13.2	7.6	3.1	6	-	-	-	9	120	169	20	25	-	-	-	190
3	12	62	1.0	13.6	7.7	3.3	6	-	-	-	9	118	189	20	25	-	-	-	-
3	19	62	1.1	8.0	7.5	3.5	7	-	-	-	8	115	154	50	25	-	-	-	520
3	26	62	2.8	9.3	7.8	4.2	6	-	-	-	10	91	121	20	200	-	-	-	300
4	2	62	2.9	9.2	7.6	4.6	6	-	-	-	8	90	127	20	210	-	-	-	560
4	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600
4	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50
4	23	62	11.0	9.0	8.4	5.1	9	-	-	-	9	118	125	20	200	37	.0	-	90
5	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*50
5	14	62	18.8	7.4	8.2	3.5	8	-	-	-	8	110	138	150	75	-	-	-	-
5	21	62	-	-	-	-	-	-	-	-	-	-	-	-	-	42	-	-	-
5	28	62	19.4	8.2	8.3	3.4	8	-	-	-	8	108	125	125	75	-	-	-	-
5	29	62	-	-	-	-	-	-	-	-	-	-	-	-	-	39	.0	-	-
6	4	62	20.0	7.9	8.2	3.0	7	-	-	-	9	102	122	100	75	-	-	-	500
6	25	62	21.0	6.2	8.2	3.0	5	-	-	-	8	124	136	25	50	-	-	-	150
7	2	62	21.2	6.0	8.1	3.3	6	-	-	-	8	120	134	25	40	-	-	-	370
7	23	62	24.0	5.0	7.9	1.8	5	-	-	-	8	154	174	-	200	-	-	-	3400
8	6	62	25.0	5.4	8.1	2.8	5	-	-	-	8	148	198	50	100	-	-	-	880
9	4	62	21.2	6.0	8.1	3.1	7	-	-	-	8	121	145	50	150	-	-	-	1500
9	10	62	20.6	6.2	8.1	2.6	5	-	-	-	8	158	128	50	100	-	-	-	-
9	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*40

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at McGregor, Iowa
Operated by U.S. Geological Survey

STATE	Iowa
MAJOR BASIN	Upper Mississippi River
MINOR BASIN	Mississippi-Wapsipinicon & Trib.
STATION LOCATION	Mississippi River at Dubuque, Iowa

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	16.700	18.700	18.500	13.200	12.100	14.200	84.900	71.400	85.400	34.600	36.000	55.700
2	15.100	22.400	18.600	14.100	12.100	14.100	84.800	69.700	88.300	36.000	33.500	56.200
3	12.800	27.200	18.600	15.400	12.100	14.100	82.000	66.200	90.600	35.900	33.200	55.000
4	12.500	26.100	18.300	14.400	12.000	14.100	80.000	65.500	93.400	30.000	34.500	51.400
5	12.900	24.100	16.500	14.500	12.100	15.800	78.200	64.000	95.900	28.800	35.700	47.200
6	13.000	23.900	16.800	14.500	12.100	15.800	77.000	62.300	94.300	29.500	36.500	47.600
7	14.300	25.500	16.300	14.400	12.100	16.000	77.000	62.300	93.900	33.100	32.200	47.000
8	13.000	26.300	15.100	14.400	12.100	16.200	79.800	62.500	90.900	37.200	26.800	44.600
9	13.000	24.300	12.800	13.500	12.100	16.300	82.500	54.700	87.900	39.000	27.400	41.300
10	13.200	25.100	9.200	13.400	12.100	16.400	83.000	52.700	84.100	38.600	26.700	38.100
11	16.600	25.600	6.700	12.700	12.100	16.400	86.100	50.700	81.500	37.300	25.500	38.600
12	20.600	24.900	11.400	12.700	12.100	17.400	87.800	49.500	77.600	38.000	24.600	39.000
13	19.500	20.900	11.300	12.600	12.800	18.200	89.600	49.400	73.500	38.700	23.800	39.200
14	18.500	17.800	11.300	12.500	12.800	17.900	93.800	48.900	70.800	40.800	26.200	38.800
15	15.600	16.300	11.300	12.400	13.800	18.100	96.600	49.100	65.300	41.700	29.900	38.500
16	14.300	18.300	12.400	11.700	13.800	18.000	100.000	49.000	61.900	40.400	29.500	39.600
17	14.800	20.700	14.100	11.900	13.600	18.400	103.000	49.100	59.200	38.100	29.800	43.500
18	14.100	20.600	19.600	11.900	13.400	17.700	104.000	49.400	58.900	38.700	28.500	44.500
19	15.400	20.900	18.700	12.000	13.200	17.500	104.000	54.600	57.600	39.200	26.600	45.200
20	17.100	19.400	15.300	12.100	13.000	18.100	104.000	59.400	55.500	41.900	24.800	45.300
21	16.200	15.000	15.800	12.000	12.700	18.500	101.000	60.000	48.400	44.600	22.900	45.600
22	14.100	14.300	15.800	12.000	12.800	21.000	98.300	61.000	46.700	44.300	20.700	45.300
23	14.100	18.900	15.700	12.000	12.600	21.500	94.000	62.700	45.900	45.400	21.100	45.500
24	14.400	20.800	15.700	12.000	12.600	23.000	89.500	62.000	44.400	44.600	29.500	41.300
25	14.100	19.100	15.700	12.100	12.700	25.000	84.700	61.500	44.200	43.300	35.300	33.400
26	14.100	17.000	15.800	12.100	13.800	28.000	81.600	63.800	43.700	41.700	33.900	29.700
27	14.500	15.200	15.900	12.100	14.300	35.400	79.300	67.600	40.000	39.700	28.600	27.500
28	14.200	14.400	16.000	12.000	14.200	43.100	77.200	68.300	36.600	38.900	21.800	26.600
29	15.200	15.000	13.500	12.100		58.100	75.600	72.000	34.300	38.800	24.000	24.700
30	18.400	16.000	13.500	12.100		67.400	73.300	77.500	34.100	38.700	30.700	22.300
31	18.400		13.400	12.000		76.500		82.500		38.000	45.700	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN UPPER PORTION UPPER MISSISSIPPI
STATION LOCATION MISSISSIPPI RIVER LOCK DAM #3 BELOW
ST. PAUL, MINNESOTA 27

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLOROFORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGENATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	3	61	10	10	3748	226	41	185	1	10	17	1	1	14	1	5	2	1	5
11	7	61	11	14	3324	259	64	195	1	17	23	2	1	14	6	8	4	1	10
12	5	61	12	12	3449	264	67	197	1	18	23	1	1	19	2	7	5	1	12
1	2	62	1	9	3673	280	85	195	3	20	30	3	2	25	0	11	5	2	14
2	6	62	2	13	3978	338	130	208	4	29	48	4	3	39	2	22	9	4	14
3	6	62	3	13	4531	245	101	144	3	19	37	2	3	30	2	20	7	2	13
4	3	62	4	9	3161	252	114	138	2	29	41	4	3	30	4	17	9	2	14
5	1	62	5	8	3811	210	94	116	4	27	28	3	3	21	1	10	8	2	15
6	5	62	6	12	4106	179	84	95	6	25	19	2	2	13	2	8	8	2	16
7	3	62	7	10	3338	216	86	130	2	21	27	4	3	18	2	9	5	2	20
8	7	62	8	9	1807	360	141	219	6	45	28	4	2	22	0	13	13	3	33
9	4	62	9	11	3922	159	48	111	1	11	21	2	1	17	1	6	4	1	4

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN UPPER PORTION UPPER MISSISSIPPI
STATION LOCATION MISSISSIPPI RIVER LOCK DAM #3 BELOW
ST. PAUL, MINNESOTA 27

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMI-NATION		ALPHA						BETA						DATE OF DETERMI-NATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	3	61	11	7	-	-	-	-	-	-	1	5	19	8	20	9						
10	10	61	10	30	-	-	-	-	-	-	4	5	28	8	32	9						
10	17	61	11	1	0	1	0	1	0	1	5	4	31	6	36	7						
10	24	61	11	2	-	-	-	-	-	-	4	5	25	8	29	9						
10	31	61	11	9	-	-	-	-	-	-	5	5	26	8	31	9						
11	7	61	11	17	-	-	-	-	-	-	17	5	63	8	80	9						
11	14	61	11	24	-	-	-	-	-	-	26	6	69	8	95	10						
11	21	61	11	30	0	1	1	1	1	1	29	5	48	7	77	9						
11	28	61	12	5	0	1	1	2	1	2	11	4	57	7	68	8						
12	5	61	12	14	-	-	-	-	-	-	16	5	38	8	54	9						
12	12	61	12	19	-	-	-	-	-	-	12	4	30	6	42	7						
12	19	61	12	28	0	0	1	1	1	1	15	4	35	6	50	7						
12	28	61	1	5	-	-	-	-	-	-	30	6	21	8	51	10						
1	3	62	1	12	-	-	-	-	-	-	2	5	18	8	20	9						
1	9	62	1	18	-	-	-	-	-	-	10	5	24	8	34	9						
1	16	62	1	24	1	1	0	1	1	1	16	6	13	8	29	10						
1	23	62	1	31	-	-	-	-	-	-	5	11	11	13	16	17						
1	30	62	2	8	-	-	-	-	-	-	10	6	23	8	33	10						
2	6	62	2	15	-	-	-	-	-	-	0	5	9	6	9	8						
2	13	62	2	23	-	-	-	-	-	-	0	5	2	8	2	9						
2	20	62	3	2	0	0	2	2	2	2	4	4	16	6	20	7						
2	27	62	3	12	-	-	-	-	-	-	6	4	16	6	22	7						
3	7	62	3	16	-	-	-	-	-	-	0	5	4	8	4	9						
3	13	62	3	23	-	-	-	-	-	-	1	5	14	8	15	9						
3	27	62	4	9	0	0	1	1	1	1	8	4	25	6	33	7						
4	2	62	4	16	-	-	-	-	-	-	30	8	32	8	62	-						
4	10	62	4	24	-	-	-	-	-	-	74	14	113	16	187	21						
4	19	62	4	30	0	1	1	1	1	1	17	5	53	7	70	9						
4	24	62	6	14	-	-	-	-	-	-	11	6	61	9	72	11						
5	1	62	6	4	-	-	-	-	-	-	0	18	31	16	31	24						
5	8	62	6	19	-	-	-	-	-	-	4	7	41	10	45	12						
5	15	62	6	22	-	-	-	-	-	-	46	14	42	6	88	15						
5	22	62	6	26	0	1	2	2	2	2	19	7	54	9	73	11						
6	5	62	8	1	-	-	-	-	-	-	4	5	67	10	71	11						
6	17	62	7	17	-	-	-	-	-	-	46	16	93	11	139	19						
6	19	62	7	14	1	1	3	2	4	2	24	4	2	6	86	7						
6	26	62	7	20	-	-	-	-	-	-	23	4	50	5	73	6						
7	3	62	8	1	-	-	-	-	-	-	9	13	42	16	51	21						
7	8	62	8	6	-	-	-	-	-	-	12	4	33	4	45	6						
7	16	62	8	8	2	1	3	3	5	3	16	12	52	15	68	19						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MINNESOTA

MAJOR BASIN UPPER MISSISSIPPI RIVER

MINOR BASIN UPPER PORTION UPPER MISSISSIPPI

STATION LOCATION MISSISSIPPI RIVER LOCK DAM #3 BELOW
ST. PAUL, MINNESOTA 27

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	24	62	8	9	-	-	-	-	-	-	31	13	62	15	93	20						
7	31	62	9	20	-	-	-	-	-	-	4	13	51	17	55	21						
8	14	62	9	3	-	-	-	-	-	-	4	11	37	14	41	18						
8	21	62	10	13	0	0	2	2	2	2	7	5	44	9	51	10						
8	28	62	9	30	-	-	-	-	-	-	49	12	4	8	53	14						
9	4	62	9	28	-	-	-	-	-	-	11	7	41	10	52	12						
9	11	62	10	2	-	-	-	-	-	-	9	6	30	9	39	9						
9	18	62	10	9	0	0	2	2	2	2	7	7	29	10	36	12						
9	25	62	10	17	-	-	-	-	-	-	4	6	29	8	33	10						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN UPPER PORTION UPPER MISSISSIPPI
STATION LOCATION MISSISSIPPI RIVER LOCK DAM #1 BELOW
ST. PAUL, MINNESOTA 27

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See ta: for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	10	61	38400	0	290	5230	0	540	850	30690	850	9380	290	71	8	68	6	24	4	34	3	38	3	60	3	69	3	25	2	30	2	92	1
10	23	61	20600	50	160	3950	0	160	360	15640	340	6480	290	71	7	68	5	44	3	25	3	38	2	60	2	30	2	69	2	67	1	35	1
11	14	61	22300	110	50	1720	0	650	20	19120	630	5610	360	71	7	68	3	25	2	57	2	92	2	38	2	69	1	51	1	24	1		
11	21	61	16900	20	20	670	0	330	20	15320	560	1430	80	71	7	92	2	38	2	69	1	51	1										
12	13	61	5000	380	50	660	0	470	90	2880	430	1710	20	71	5	3	2	25	2	92	1	57	1	51	1								
12	28	61	9000	180	250	270	0	200	140	7810	180	360	0	71	6	11	1	3	1	51	1												
1	9	62	1500	0	0	0	0	20	20	1470	0	90	50	71	4																		
1	23	62	500	0	0	40	0	0	0	390	60	20	40	68	1																		
2	6	62	200	0	20	0	0	0	0	180	0	50	20	71	1																		
2	20	62	5100	20	0	50	0	70	4540	340	50	0	0	65	5	71	1																
3	7	62	800	0	0	0	0	670	0	110	20	20	0	57	3																		
3	28	62	2600	0	0	170	0	730	310	1280	120	250	20	71	3	51	2	68	2	62	1	25	1										
4	3	62	7600	0	20	460	0	730	0	3790	2590	2610	770	71	4	69	3	92	3	68	3	51	2	88	2	78	2	91	1	38	1	57	1
4	17	62	1400	0	40	250	20	110	0	740	230	1060	550	71	2	68	1																
5	1	62	35700	0	20	1520	0	1090	290	29660	3140	4550	1150	71	8	68	5	92	4	69	3	51	3	88	3	82	2	25	2	57	1	34	1
5	15	62	29800	250	80	3230	0	790	170	20660	4600	72860	500	71	7	68	4	92	4	38	4	69	3	88	2	77	2	51	2	24	2	25	2
6	5	62	6900	80	40	420	250	40	0	4920	1180	3670	1140	71	5	68	3	69	2	50	1	92	1										
6	19	62	20000	330	830	2110	*	1620	460	8820	4370	4840	870	71	6	51	4	68	4	50	4	69	3	25	3	12	3	82	2	38	2	87	2
7	3	62	7900	210	100	810	190	410	190	4950	1010	2240	230	71	4	68	3	51	2	87	1	88	1	38	1	25	1	50	1	60	1		
7	17	62	7700	80	170	620	170	210	40	4550	1820	1530	410	71	4	68	4	69	3	92	2	88	1	85	1	38	1	25	1	50	1	51	1
8	7	62	6700	210	60	870	20	210	210	4140	990	1410	120	68	4	71	4	69	3	38	2	88	2	3	1	25	1	60	1	51	1		
8	21	62	8500	150	100	1030	330	1220	540	4180	910	3270	370	71	4	68	4	51	3	69	3	60	2	38	2	50	2	24	1	92	1	88	1
9	4	62	11400	40	60	1820	230	970	290	6440	1570	1780	370	71	5	68	4	69	4	38	3	51	3	88	3	87	2	25	1	60	1	50	1
9	11	62	3400	50	90	340	0	0	0	2810	160	680	470	71	4	68	4																
*6	19	62					1450																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN UPPER PORTION UPPER MISSISSIPPI
STATION LOCATION MISSISSIPPI RIVER LOCK DAM #3 BELOW
ST. PAUL, MINNESOTA 027

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																		NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA								
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	10	61	56	80	58	11	83	3	61	2	4	90	0	119	2	5	11	1							11	50	1	76	1	51	1	0	0
10	23	61	56	62	82	16	26	7	58	4	11	20	0	211	2	6	11	3	17	1					13	50	1	76	1	51	1	0	0
11	14	61	82	60	56	11	83	11	89	5	13	110	0	40	2	2	11	1	17	1					8	76	1					0	0
11	21	61	82	62	83	17	56	12	26	4	5	0	10	9	11	1									0							0	0
12	12	61	82	72	83	18	89	3	56	3	4	320	0	47	2	2	11	2	17	1	21	1			4	51	1					0	0
12	28	61	82	79	92	6	56	5	83	2	8	320	0	36	11	2	21	1	17	1	2	1			4	50	1					0	0
1	9	62	82	86	56	3	89	2	92	2	7	20	10	18	17	1	11	1							3	50	1					0	0
1	23	62										0	10	5											1							0	0
2	6	62										20	20	7											3	50	1					1	0
2	20	62										140	60	1											0							0	0
3	7	62	82	27	56	14	64	5	18	5	49	20	10	0											0							0	0
3	28	62	82	47	26	12	56	6	89	5	30	60	20	3											3	50	1					0	0
4	3	62	56	43	92	9	82	5	47	5	38	100	10	19	20	2									2							1	0
4	17	62	82	14	26	13	56	11	58	8	54	0	0	4											2							0	0
5	1	62	56	33	92	10	45	9	82	8	40	0	30	143	21	4	15	3	2	2	11	2	17	2	28	50	3	76	3			0	1
5	15	62	56	30	80	21	92	12	47	8	29	0	0	188	11	5	2	3							42	50	4	51	1	76	3	1	0
6	5	62	56	26	82	22	58	7	80	6	39	60	10	91	11	4	17	3	2	1	21	1			22	50	3	76	2	51	1	1	2
6	19	62	56	21	80	18	82	16	58	10	35	120	10	14	11	1									16	76	2	50	1			0	0
7	3	62	56	26	82	20	58	17	26	11	26	0	0	16	17	1	11	1							1							0	0
7	17	62	56	35	58	17	26	12	82	6	30	0	0	158	17	4	11	3	21	3	2	2	22	2	18	50	2	76	1			1	1
8	7	62	56	39	58	26	26	11	82	4	20	0	0	640	11	5	17	5	2	5	22	4	16	4	3	76	1					0	0
8	21	62	58	37	56	37	26	7	83	6	13	0	0	574	11	6	2	6	22	4	17	1	16	1	0							0	0
9	4	62	58	26	82	21	56	19	26	13	21	0	0	38	2	2	11	2	22	1					0							0	1
9	11	62	58	28	26	19	82	18	56	15	20	0	0	344	11	5	18	3	17	3	2	3	21	3	9	50	2	51	1			0	1

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN UPPER PORTION UPPER MISSISSIPPI
STATION LOCATION MISSISSIPPI RIVER LOCK DAM #3 BELOW
ST. PAUL, MINNESOTA 27

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	13.2	7.6	8.2	3.5	21	.1	1.6	.8	10	158	170	25	25	26	.4	246	50000
10	10	61	15.6	10.3	8.4	6.9	29	.5	2.3	.3	10	163	160	25	55	31	.3	245	5300
10	17	61	14.6	8.8	8.0	4.6	23	.1	.8	.6	13	159	180	20	35	47	.5	268	2100
10	24	61	11.4	8.8	8.1	5.1	23	.5	.5	.6	13	166	188	25	40	33	.5	262	16000
10	31	61	9.6	9.5	8.1	4.8	23	.2	.3	.7	12	173	198	20	40	34	.6	270	27000
11	7	61	6.0	9.8	8.1	3.0	18	.1	.6	.6	9	157	173	20	9	25	.5	231	58000
11	14	61	4.9	10.8	8.2	3.4	20	.2	.7	.4	10	161	184	20	35	27	.4	240	16000
11	21	61	3.0	12.9	8.3	4.2	21	.5	1.6	.3	10	162	186	20	25	-	.5	265	11000
12	5	61	1.9	11.6	8.1	4.2	23	.4	1.0	.5	11	171	194	20	15	36	.6	282	-
12	12	61	.2	13.0	8.1	3.1	23	.3	.8	.7	12	179	208	15	9	37	.6	279	5700
12	19	61	1.2	6.7	7.9	4.2	17	.4	.7	1.0	14	180	204	20	10	38	.9	296	7000
1	3	62	.9	6.6	7.9	2.9	20	.1	.8	1.0	13	180	200	20	8	33	.8	295	7200
1	9	62	.1	7.0	7.7	1.3	20	.4	-	1.2	11	150	160	20	7	29	.9	277	500
1	16	62	.0	3.8	7.8	3.4	23	.3	.8	1.1	13	193	210	20	10	28	1.0	295	7300
1	23	62	.1	3.5	7.6	3.4	-	.0	.5	1.3	14	189	208	20	7	36	1.1	348	5700
1	30	62	.1	3.0	7.7	3.6	21	.1	.2	1.4	13	183	202	20	9	28	1.0	290	1800
2	6	62	.1	3.3	7.7	4.3	22	.2	-	1.4	16	191	207	20	9	30	1.1	309	3100
2	14	62	.5	2.6	7.7	4.0	21	.2	.6	1.4	18	180	198	15	9	28	1.0	271	1600
2	20	62	.1	2.8	7.6	4.4	32	-	-	1.4	13	180	156	10	10	26	1.1	257	11000
2	27	62	.1	2.7	7.7	3.3	22	.2	-	1.3	16	186	202	10	7	27	1.1	280	850
3	15	62	.5	2.3	7.6	3.4	19	.4	.9	1.2	14	172	202	10	9	-	1.0	278	1000
3	27	62	2.7	4.5	7.6	3.3	18	.1	.9	.9	13	153	172	10	7	22	.8	246	2100
4	3	62	1.0	9.1	7.8	6.1	34	.3	.9	.9	7	126	154	15	170	30	.2	215	18000
4	10	.62	1.1	10.4	7.8	4.9	34	.0	.0	.9	6	104	149	25	150	32	.1	213	3800
4	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6000
4	24	62	11.3	10.0	8.1	3.7	29	.9	12.0	.2	6	135	212	30	60	64	.2	300	17000
5	1	62	13.3	8.9	8.3	3.8	33	2.0	12.1	.1	6	146	226	30	95	75	.2	302	37000
5	8	62	13.4	.8	8.1	3.5	32	5.2	11.9	.2	6	142	214	30	65	69	.2	297	33000
5	15	62	18.4	7.5	8.1	3.4	33	4.2	12.1	.2	7	142	206	30	85	62	.2	294	51000
5	22	62	17.6	7.3	8.1	3.2	35	5.5	13.2	.2	6	145	190	35	80	51	.2	262	28000
6	5	62	16.6	7.0	8.0	2.9	47	4.7	14.7	.1	5	140	196	70	40	52	.3	275	16000
6	12	62	18.7	6.4	8.0	2.8	42	7.0	14.9	.1	5	156	210	60	85	57	.3	296	71000
6	19	62	20.4	5.9	8.1	3.2	46	5.3	15.6	.2	6	167	236	60	110	67	.3	331	75000
6	26	62	23.6	6.2	8.1	4.4	40	6.6	-	.1	6	167	230	40	90	64	.3	314	13000
7	3	62	22.7	5.8	8.0	2.9	40	6.6	14.2	.4	7	187	232	40	75	66	.4	313	31000
7	10	62	24.5	5.5	8.0	2.7	40	5.0	14.2	.3	7	150	220	40	130	69	.3	320	55000
7	17	62	22.4	5.5	7.9	3.8	37	5.9	13.9	.2	6	172	240	40	100	67	.4	342	65000
7	24	62	22.4	5.7	8.1	2.7	38	5.7	12.8	.2	6	182	248	35	130	68	.5	343	10000
7	31	62	21.3	6.6	8.2	2.9	35	4.4	12.2	.1	6	193	266	35	100	77	.6	357	14000

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN UPPER PORTION UPPER MISSISSIPPI
STATION LOCATION MISSISSIPPI RIVER LOCK DAM #3 BELOW
ST. PAUL, MINNESOTA 27

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	7	62	24.5	6.3	8.0	3.2	38	4.5	12.8	.2	7	198	268	40	85	77	.5	377	14000
8	14	62	21.9	6.3	8.1	3.0	33	5.8	13.9	.2	7	188	243	35	80	61	.4	345	28000
8	21	62	23.9	6.6	8.1	3.2	39	5.5	12.4	.1	7	180	227	30	75	56	.4	320	15000
8	28	62	23.0	6.5	8.0	4.0	34	5.6	12.4	.2	7	170	206	30	50	44	.4	290	20000
9	5	62	19.0	7.1	8.1	3.1	29	5.8	12.6	.3	5	186	230	25	75	52	.4	313	59000
9	11	62	16.5	7.0	8.0	4.9	28	5.7	12.5	.3	7	172	212	30	60	41	.5	285	-
9	18	62	18.0	7.2	8.0	3.2	28	5.4	12.2	.3	8	193	213	30	60	39	.4	275	63000
9	25	62	15.6	7.9	8.0	3.2	27	5.4	11.2	.2	8	171	202	30	40	35	.5	259	41000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Prescott, Wisconsin
Operated by U.S. Geological Survey

STATE	Minnesota
MAJOR BASIN	Upper Mississippi River
MINOR BASIN	Upper Portion-Upper Mississippi
STATION LOCATION	Mississippi River Lock and Dam #3 below St. Paul, Minnesota

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	5.940	9.270	7.130	5.850	5.080	4.950	21.300	36.900	68.800	18.500	26.000	15.500
2	4.360	9.380	7.160	6.020	5.040	5.410	24.000	35.000	65.300	18.000	24.800	14.400
3	4.710	10.500	7.400	5.930	5.060	5.320	27.400	33.500	62.400	18.600	23.800	15.800
4	6.020	9.980	7.290	5.900	5.110	5.620	31.000	31.600	59.800	19.200	22.800	18.800
5	4.730	11.100	6.940	6.180	5.540	5.990	36.000	30.000	56.000	20.900	21.500	19.100
6	5.570	12.800	7.140	6.290	5.610	6.310	43.800	28.200	51.700	22.900	21.400	18.700
7	6.280	10.900	6.420	5.870	5.720	5.990	51.300	26.000	48.100	25.000	20.800	17.200
8	5.540	9.740	5.100	6.240	5.450	6.170	57.200	24.500	45.400	26.700	20.700	16.300
9	4.860	8.800	4.570	6.160	5.080	6.200	63.300	22.500	43.100	27.400	20.100	17.100
10	6.790	8.390	4.450	5.160	4.710	6.530	67.200	21.700	41.200	28.800	19.900	17.500
11	5.360	8.120	4.460	5.540	4.750	6.480	70.000	21.700	40.300	29.700	19.900	17.300
12	7.190	8.540	5.080	5.010	4.740	7.000	71.500	22.800	38.800	30.700	20.400	17.200
13	5.670	8.150	5.480	5.070	4.870	6.870	71.100	24.200	37.200	30.700	20.000	17.600
14	5.800	7.570	5.740	5.080	5.240	6.670	69.700	24.600	35.600	30.800	19.700	17.500
15	5.160	7.190	5.970	5.260	5.760	7.010	66.800	24.900	34.000	30.800	19.700	17.400
16	5.150	7.730	6.490	5.230	5.630	7.350	64.000	27.300	32.200	30.600	19.900	17.300
17	5.150	7.100	6.460	5.180	5.710	7.600	61.600	29.200	30.300	30.500	19.600	18.100
18	5.980	6.680	6.600	5.110	5.590	7.660	58.300	30.400	29.400	29.700	18.600	18.600
19	6.320	6.380	6.680	5.030	5.350	7.310	51.900	32.100	28.000	29.900	17.500	18.100
20	7.030	6.510	6.080	5.110	5.430	7.960	53.800	33.000	26.900	30.700	17.200	16.800
21	7.430	6.820	6.350	5.100	5.440	7.940	52.800	33.400	26.600	29.800	16.000	16.300
22	8.540	8.080	5.950	4.910	5.430	8.230	51.300	35.700	26.600	29.900	16.200	15.500
23	5.710	7.610	6.530	4.730	5.530	8.460	49.500	39.400	26.500	29.900	17.100	14.600
24	6.100	6.930	6.830	4.870	5.440	8.270	48.200	46.700	26.000	29.700	17.500	13.900
25	3.680	8.460	6.920	4.580	5.440	10.600	46.400	57.000	24.600	29.900	15.200	14.000
26	5.740	5.060	6.990	4.470	5.460	9.930	45.400	65.500	23.100	29.600	14.800	13.300
27	8.120	6.800	6.310	4.420	5.400	10.700	44.100	71.200	22.500	29.100	14.400	13.200
28	6.860	7.020	5.990	4.430	5.860	13.300	42.100	74.400	20.900	29.000	13.600	14.100
29	9.040	7.070	5.650	4.720		15.300	40.000	75.800	20.700	28.000	13.500	14.100
30	7.270	6.950	5.680	5.050		15.700	39.000	74.600	20.200	27.800	14.300	14.000
31	6.460		5.930	5.110		19.200		71.900		26.800	16.300	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MISSOURI

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT
ST. LOUIS, MISSOURI 28

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	16	61	10	30	6410	123	43	80	1	12	11	1	1	8	1	4	4	1	10
11	15	61	11	29	3221	258	46	212	0	11	14	2	1	11	0	7	3	3	8
12	15	61	1	1	8393	109	36	73	1	8	13	1	1	11	0	5	2	1	6
2	15	62	3	1	3538#	210	47	163	2	13	16	2	2	12	0	6	3	0	7
3	15	62	3	29	2280	355	138	217	1	37	41	4	3	32	2	17	14	3	25
5	23	62	6	6	3695	98	34	64	1	11	9	1	1	7	0	4	4	0	5
6	15	62	6	29	2663	110	47	63	1	14	13	1	2	9	1	5	4	1	9
7	16	62	7	30	2648	142	46	96	1	13	13	2	1	9	1	8	3	1	7
8	15	62	8	29	4680#	101	38	63	2	11	9	1	1	6	1	6	3	1	6
9	14	62	9	28	4290	163	34	129	0	8	14	1	1	12	0	5	1	1	5

ESTIMATED

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MISSOURI

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT

ST. LOUIS, MISSOURI 28

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	14	-	-	-	-	-	-	47	12	18	8	65	14						
10	16	61	10	25	26	21	0	1	26	21	0	1	25	6	25	6						
10	30	61	11	9	-	-	-	-	-	-	9	14	17	14	26	20						
11	7	61	11	24	-	-	-	-	-	-	94	12	47	7	141	14						
11	13	61	11	28	-	-	-	-	-	-	75	10	39	7	114	12						
11	20	61	11	30	1	1	0	1	1	1	38	6	46	6	84	8						
11	27	61	12	26	-	-	-	-	-	-	71	10	53	8	124	13						
12	4	61	12	18	-	-	-	-	-	-	23	8	37	9	60	12						
12	11	61	12	19	-	-	-	-	-	-	31	14	44	15	75	21						
12	18	61	12	29	2	3	2	2	4	4	42	13	29	11	71	17						
12	26	61	1	5	-	-	-	-	-	-	35	13	50	14	85	19						
1	2	62	1	12	-	-	-	-	-	-	14	12	24	15	38	19						
1	8	62	1	19	-	-	-	-	-	-	20	16	22	10	42	19						
1	15	62	1	24	1	1	2	2	3	2	36	8	35	8	71	11						
1	22	62	2	6	-	-	-	-	-	-	17	6	28	9	45	11						
1	29	62	2	8	-	-	-	-	-	-	122	11	38	6	160	13						
2	5	62	2	19	-	-	-	-	-	-	73	11	40	8	113	14						
2	13	62	2	26	-	-	-	-	-	-	6	4	30	6	36	7						
2	19	62	3	5	22	11	1	1	23	11	97	18	16	5	113	19						
2	26	62	3	12	-	-	-	-	-	-	55	19	26	8	81	21						
3	5	62	3	14	-	-	-	-	-	-	29	16	11	13	40	21						
3	12	62	3	23	-	-	-	-	-	-	50	16	27	13	77	21						
3	19	62	3	30	14	8	2	1	16	8	187	19	50	7	237	21						
3	26	62	4	6	-	-	-	-	-	-	136	53	36	8	172	54						
4	2	62	4	13	-	-	-	-	-	-	144	48	50	8	194	49						
4	9	62	6	13	-	-	-	-	-	-	124	39	38	7	162	40						
4	16	62	4	30	-	-	-	-	-	-	105	20	45	8	150	22						
4	24	62	5	23	2	3	1	2	3	4	50	22	79	18	129	28						
4	30	62	6	4	-	-	-	-	-	-	38	19	41	17	79	25						
5	14	62	6	25	-	-	-	-	-	-	33	18	39	17	72	25						
5	21	62	6	26	-	-	-	-	-	-	18	12	40	14	58	18						
5	28	62	7	2	16	11	4	3	20	11	119	53	30	18	149	56						
6	4	62	7	3	-	-	-	-	-	-	455	98	42	8	497	98						
6	11	62	7	13	-	-	-	-	-	-	202	51	41	5	243	51						
6	18	62	7	16	-	-	-	-	-	-	313	89	44	8	357	89						
6	25	62	7	23	3	10	4	3	7	10	67	57	36	12	103	58						
7	2	62	7	30	-	-	-	-	-	-	138	74	6	9	144	75						
8	6	62	8	28	-	-	-	-	-	-	101	17	49	14	150	22						
8	13	62	8	27	-	-	-	-	-	-	91	34	31	7	122	35						
8	20	62	9	10	6	13	8	4	14	14	245	72	38	15	283	74						
8	27	62	9	18	-	-	-	-	-	-	28	71	34	18	62	73						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MISSOURI
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
ST. LOUIS, MISSOURI 28

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
9	4	62	9	28	-	-	-	-	-	-	57	43	28	18	85	47						
9	17	62	10	16	1	7	2	3	3	8	65	63	57	16	122	65						
9	24	62	10	24	-	-	-	-	-	-	29	18	24	15	53	23						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MISSOURI

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT

ST. LOUIS, MISSOURI 28

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	300	0	0	20	0	90	20	20	130	110	200																				
10	16	61	400	0	0	40	0	20	0	80	230	0	20																				
11	7	61	300	0	0	0	0	90	0	50	130	20	110																				
11	20	61	400	0	0	20	0	0	0	100	290	0	0																				
12	4	61	400	0	0	20	0	70	20	70	200	160	310																				
12	18	61	900	0	0	0	0	100	0	480	290	40	60	71	2																		
1	2	62	1100	0	0	20	0	160	50	770	90	320	0	71	3	51	1																
1	15	62	200	0	0	0	0	40	0	150	60	60	80																				
2	5	62	800	0	0	0	0	20	0	170	580	0	80																				
2	19	62	300	0	0	20	0	20	0	50	220	0	250	91	1																		
3	6	62	500	0	0	20	0	20	0	150	290	0	0																				
3	26	62	400	0	0	0	0	0	20	40	290	50	180																				
4	2	62	700	0	0	0	0	20	0	20	640	0	20	88	1																		
4	16	62	1200	0	20	20	0	290	0	330	560	120	230	88	1																		
5	7	62	2800	0	0	170	740	300	0	1180	380	1350	590	71	3	50	3	58	1	57	1												
5	21	62	13100	170	130	2660	190	0	0	8270	1710	5530	1250	71	6	38	3	24	3	92	2	25	1	50	1	77	1	88	1				
6	4	62	400	0	0	20	0	0	0	40	350	0	0																				
6	18	62	600	0	0	0	0	100	0	190	310	0	20																				
7	2	62	800	20	0	20	0	20	40	350	330	170	120	71	1																		
7	16	62	1800	0	0	250	0	80	0	660	830	40	40	71	2	88	1	38	1	69	1												
8	6	62	1600	0	0	250	0	60	0	440	870	80	40	88	2	71	1	38	1														
8	20	62	1000	0	0	130	0	0	0	760	130	40	300	69	2	68	1	71	1														
9	4	62	11400	0	0	740	130	300	0	7170	3040	1820	2110	69	6	71	4	88	3	87	3	68	2	38	1								
9	17	62	1800	120	40	150	0	170	0	530	700	460	120	71	1	87	1	93	1														

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MISSOURI
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
ST. LOUIS, MISSOURI 028

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61										90	0	0											0							0	0
10	16	61										0	0	0											0							0	0
11	7	61										0	0	0											0							0	0
11	20	61										0	0	0											0							0	0
12	4	61	46	25	80	9	71	8	55	5	53	20	0	0											0							0	0
12	18	61	46	34	80	9	71	8	78	4	45	0	0	0											0							0	0
1	2	62	82	17	46	13	80	6	71	6	58	0	0	0											0							0	0
1	15	62										0	0	0											0							0	0
2	5	62										0	0	0											0							0	0
2	19	62										0	0	0											0							0	0
3	6	62	46	16	71	15	92	9	36	5	55	0	0	0											0							0	0
3	26	62										20	0	0											0							1	0
4	2	62	71	33	78	8	92	7	74	6	46	20	0	0											0							0	0
4	16	62	71	16	80	7	82	6	26	6	65	80	0	0											0							0	0
5	7	62	92	22	80	15	82	9	26	7	47	0	0	14	2	2									3							0	0
5	21	62	80	85	92	3	58	2	71	2	8	0	0	249	11	6	2	4							75	50	5	76	3	51	2	0	2
6	4	62	92	21	71	16	80	10	86	5	48	0	0	1											2							0	0
6	18	62	71	28	92	10	9	6	46	5	51	0	0	-											-							-	-
7	2	62	83	16	80	12	71	11	47	7	54	40	0	0											5	76	1					0	0
7	16	62	58	23	71	9	92	6	46	6	56	0	0	0											0							0	0
8	6	62	58	23	71	14	47	7	46	5	51	0	0	-											-							-	-
8	20	62	58	24	26	9	46	8	92	6	53	0	0	-											-							-	-
9	4	62	58	37	80	27	26	7	64	3	26	0	0	3											0							0	0
9	17	62	58	24	82	10	26	9	80	8	49	0	0	-											-							-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MISSOURI
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
ST. LOUIS, MISSOURI 28

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	18.3	8.4	7.8	1.7	16	2.9	9.9	.0	13	112	145	26	450	71	.5	215	12000
10	9	61	18.3	7.8	8.1	1.6	21	3.3	11.0	.0	20	128	174	20	800	83	.3	304	32000
10	16	61	19.4	6.3	8.2	3.1	75	-	-	.0	13	114	138	28	1800	45	.3	256	57000
10	23	61	15.5	8.6	8.1	1.8	15	2.6	9.7	.0	15	128	160	25	400	69	.3	296	5000
10	30	61	16.1	8.7	8.3	2.0	20	-	-	-	20	194	230	15	280	70	.4	-	-
11	6	61	12.8	6.7	8.2	2.9	71	-	-	.1	10	98	115	40	1400	27	.2	154	27000
11	13	61	12.2	8.7	8.2	1.4	13	3.2	8.6	.1	11	124	145	38	300	43	.2	233	4600
11	20	61	10.0	9.5	8.1	3.9	40	4.7	12.0	.1	12	110	140	26	1100	32	.3	194	45000
11	27	61	10.0	10.4	8.3	2.2	26	2.2	6.7	.1	12	124	147	24	400	20	.3	223	7600
12	4	61	11.1	10.4	8.2	2.2	26	1.8	5.7	.1	13	196	234	22	220	20	.3	313	11000
12	11	61	7.8	11.8	8.0	2.3	26	1.6	3.9	.0	15	208	105	20	125	70	.3	399	9500
12	18	61	3.3	13.8	8.2	2.3	25	1.7	3.6	.1	14	208	250	16	120	82	.3	380	8000
12	26	61	3.9	12.2	8.1	5.4	36	2.3	7.6	.1	18	121	161	26	250	60	.0	326	-
1	2	62	3.9	12.8	8.4	3.9	-	-	-	-	31	100	231	14	84	89	.0	-	-
1	8	62	1.1	12.6	8.7	4.3	25	3.6	7.0	.2	29	219	228	15	165	64	.0	369	*170
1	15	62	2.2	12.6	8.7	3.8	25	-	-	-	19	219	280	15	95	67	.0	-	6200
1	22	62	3.3	12.5	8.2	3.8	25	3.4	4.8	.2	18	199	246	15	45	83	.0	365	570
1	29	62	.6	11.7	8.2	6.0	25	5.1	9.0	.3	15	145	165	26	260	69	.3	268	780
2	5	62	4.4	10.5	8.0	3.0	26	4.9	10.0	.4	13	139	173	25	260	56	.1	240	5400
2	13	62	5.6	10.9	8.0	5.8	0	-	-	-	9	113	135	27	850	51	.3	-	11000
2	19	62	3.9	10.9	8.0	3.8	29	-	5.2	.2	14	126	150	26	650	51	.0	243	11000
2	26	62	5.6	11.1	8.1	3.7	30	2.9	6.0	.2	13	131	158	30	675	60	.0	288	8800
3	5	62	3.3	12.2	8.2	8.9	30	-	-	.2	20	150	227	24	210	73	.3	337	2300
3	12	62	5.0	11.2	8.2	3.3	31	2.2	4.8	.2	24	190	243	23	195	91	.3	361	4300
3	19	62	6.7	9.7	8.2	5.2	31	2.6	5.6	.2	11	115	143	18	850	57	.1	233	2800
3	26	62	8.9	9.2	8.1	3.3	31	-	-	-	7	100	130	26	1050	48	.2	-	-
4	2	62	8.9	8.3	8.0	4.4	31	-	-	-	-	112	140	26	1600	26	.2	-	7800
4	9	62	6.7	9.7	8.2	5.2	31	-	-	-	9	115	143	18	850	38	.1	-	8400
4	16	62	10.6	8.6	8.3	3.1	34	-	-	-	18	151	193	27	375	52	.3	-	17000
4	23	62	9.4	8.3	8.2	2.8	34	-	-	-	12	126	129	28	660	52	.3	-	2400
4	30	62	18.3	7.7	8.3	2.2	35	-	-	-	18	157	215	58	200	91	.3	-	1600
5	7	62	20.0	7.6	8.2	1.1	35	-	-	-	18	155	199	14	178	66	.3	-	930
5	14	62	23.3	7.4	8.2	1.9	35	-	-	-	24	171	225	14	180	103	.3	-	2100
5	21	62	24.4	7.5	8.3	1.5	36	-	-	-	23	184	252	14	165	134	.3	-	4400
5	28	62	25.6	6.6	8.2	2.8	37	-	-	-	23	170	234	16	1325	149	.5	-	7200
6	4	62	22.2	5.7	7.9	2.3	38	-	-	-	9	101	120	26	3250	26	.3	-	25000
6	11	62	22.8	6.4	8.1	2.1	38	-	-	-	13	117	148	24	1750	53	.5	-	15000
6	18	62	23.9	6.4	8.2	1.6	46	-	-	-	10	124	157	28	2250	75	.5	-	27000
6	25	62	25.6	6.4	8.0	1.5	31	-	-	-	17	169	235	26	750	109	.4	-	11000

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MISSOURI

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT

ST. LOUIS, MISSOURI 28

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	2	62	28.3	5.8	8.2	.4	31	-	-	-	19	155	210	26	155	92	.4	-	20000
7	9	62	25.0	5.9	8.1	1.2	34	-	-	-	17	150	204	28	1300	104	.6	-	28000
7	16	62	28.9	6.0	8.2	1.3	22	-	-	-	20	156	223	28	800	122	.6	-	16000
7	23	62	27.8	6.5	8.3	1.1	41	-	-	-	20	146	200	24	1625	87	.6	-	28000
7	30	62	25.6	6.4	8.2	1.1	33	-	-	-	18	136	192	24	1500	94	.8	-	27000
8	6	62	26.1	6.7	8.2	1.4	31	-	-	-	19	154	210	20	1000	98	-	-	33000
8	13	62	26.7	6.6	8.1	.9	20	-	-	-	23	165	227	21	700	96	.5	-	21000
8	20	62	27.2	6.7	8.0	1.2	22	-	-	-	25	170	245	20	900	130	.5	-	9000
8	27	62	27.2	5.7	8.3	.8	8	-	-	-	22	164	233	20	200	132	.5	-	7100
9	4	62	26.7	6.6	8.3	1.0	31	-	-	-	23	164	257	20	390	161	.7	-	-
9	11	62	21.7	7.3	8.2	.7	20	-	-	-	23	127	194	24	1200	161	.6	-	16000
9	17	62	23.9	7.6	8.3	1.3	17	2.6	9.0	.0	23	163	242	24	370	138	.2	434	16000
9	24	62	21.7	8.2	8.0	.8	9	2.5	6.8	.1	19	155	228	20	290	78	.2	436	10000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Hermann, Missouri
Operated by U.S. Geological Survey

STATE	Missouri
MAJOR BASIN	Missouri River
MINOR BASIN	Lower Missouri below Niobrara River
STATION LOCATION	Missouri River at St. Louis, Missouri

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	93.400	125.000	61.400	34.900	111.000	72.200	201.000	64.200	196.000	69.600	58.800	42.500
2	94.500	154.000	54.400	32.500	122.000	61.800	191.000	75.400	174.000	68.000	63.800	40.700
3	120.000	178.000	49.600	32.000	134.000	52.700	186.000	70.100	140.000	69.600	61.400	47.000
4	121.000	218.000	44.600	36.300	136.000	46.100	174.000	67.500	114.000	72.600	59.200	77.600
5	107.000	218.000	43.400	39.300	142.000	40.700	166.000	62.600	103.000	73.100	63.400	68.000
6	89.600	202.000	46.700	44.600	170.000	40.700	155.000	60.300	118.000	71.800	57.700	55.800
7	78.000	192.000	47.000	52.000	164.000	44.000	144.000	54.800	134.000	70.900	54.400	49.600
8	68.400	178.000	46.400	51.000	149.000	48.000	132.000	54.400	131.000	70.900	57.700	49.300
9	58.100	159.000	46.100	48.600	141.000	52.400	117.000	57.000	131.000	68.800	58.100	55.500
10	55.800	134.000	44.300	48.300	142.000	57.000	112.000	54.800	125.000	70.900	55.500	57.700
11	58.100	107.000	43.400	46.000	141.000	63.800	111.000	53.800	118.000	74.000	54.100	54.400
12	62.200	85.200	43.400	41.300	128.000	76.700	111.000	53.000	129.000	73.100	51.000	51.600
13	121.000	75.800	42.500	35.800	118.000	115.000	109.000	52.000	149.000	72.200	48.600	49.000
14	160.000	78.500	41.300	32.700	113.000	130.000	105.000	50.300	139.000	71.400	48.300	49.000
15	156.000	91.200	42.200	28.800	113.000	129.000	98.700	48.000	125.000	68.400	49.600	50.600
16	132.000	109.000	39.600	29.900	116.000	121.000	90.100	46.700	105.000	70.500	48.600	48.300
17	110.000	142.000	36.600	36.600	131.000	111.000	85.200	46.400	90.600	78.500	45.500	50.300
18	96.900	196.000	34.400	39.600	148.000	94.500	84.600	45.800	82.000	83.000	43.400	51.000
19	85.700	204.000	33.800	39.900	143.000	75.400	78.000	44.900	79.000	80.000	42.500	50.000
20	76.200	188.000	46.400	38.800	133.000	79.500	72.200	44.000	76.200	71.400	41.600	49.600
21	67.100	184.000	52.700	38.200	129.000	210.000	67.500	41.900	72.600	68.400	41.900	48.600
22	60.300	179.000	52.000	37.700	117.000	260.000	62.600	44.000	70.500	72.200	46.100	51.000
23	54.100	172.000	52.400	36.800	98.100	275.000	57.700	56.200	77.200	99.300	45.200	49.000
24	51.600	157.000	47.700	36.300	82.500	267.000	56.200	60.000	79.500	109.000	44.300	44.300
25	48.300	139.000	42.500	36.000	71.400	247.000	59.200	61.100	76.200	111.000	46.400	49.600
26	45.200	120.000	38.800	39.900	66.200	234.000	62.200	63.000	83.000	98.700	47.700	65.000
27	44.000	101.000	41.000	66.700	68.400	229.000	62.200	66.200	86.800	82.500	51.600	81.000
28	42.500	89.600	48.300	63.800	76.200	219.000	61.400	67.500	83.000	72.200	56.600	82.000
29	41.000	81.000	48.600	68.000		214.000	57.700	69.200	77.200	67.100	50.000	77.600
30	37.400	70.500	46.100	129.000		219.000	53.000	75.800	72.200	60.300	45.500	69.200
31	57.300		40.700	115.000		215.000		153.000		55.800	43.400	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MISSOURI
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
MISSOURI CITY, MISSOURI 108

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO	DAY	YR.	MO	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
1	29	62	2	9	11	7	6	4	17	8	89	17	38	12	127	21						
2	20	62	3	8	19	10	2	2	21	10	163	19	48	11	211	22						
2	27	62	3	14	2	4	6	4	8	6	63	14	52	12	115	18						
3	6	62	3	15	1	3	5	4	6	5	36	12	49	12	85	17						
3	13	62	3	23	18	12	2	2	20	12	204	22	51	11	255	25						
3	20	62	4	2	9	9	2	3	11	9	150	20	47	11	197	23						
3	27	62	4	9	25	23	4	2	29	23	230	60	41	9	271	61						
4	3	62	4	20	19	14	2	1	21	14	164	41	39	6	203	41						
5	29	62	6	28	57	29	2	2	59	29	384	66	56	9	440	67						
6	5	62	7	2	70	41	2	2	72	41	618	123	48	14	666	124						
6	12	62	7	17	48	50	1	2	49	50	551	12	46	8	597	14						
6	19	62	8	2	11	15	4	3	15	17	54	79	49	15	103	80						
6	25	62	7	20	0	6	0	2	0	6	303	89	92	14	395	90						
7	3	62	7	30	15	13	4	2	19	13	35	67	20	13	55	68						
7	23	62	8	15	17	24	1	2	18	24	214	98	47	16	261	99						
7	30	62	8	22	13	12	2	2	15	12	172	28	45	15	217	32						
8	6	62	8	29	0	1	2	2	2	2	37	19	16	14	53	24						
8	14	62	8	31	1	15	4	3	5	15	109	81	33	15	142	82						
8	21	62	9	6	1	5	5	3	6	6	7	61	33	14	40	63						
8	28	62	9	17	4	6	3	3	7	7	60	46	42	19	102	50						
9	5	62	9	24	39	21	2	1	41	21	203	95	17	13	220	96						
9	11	62	9	27	5	8	4	3	9	8	102	85	27	18	129	87						
9	18	62	10	15	1	6	5	3	6	7	118	83	57	18	175	85						
9	25	62	10	18	45	39	1	2	46	39	211	166	18	13	229	167						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MISSOUR.

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT

MISSOURI CITY, MISSOURI 108

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
1	29	62	1500	0	20	0	0	80	0	950	400	120	120	71	3																		
3	6	62	300	0	0	0	0	60	0	60	130	20	0																				
3	20	62	500	20	0	0	0	90	0	70	290	70	160																				
4	3	62	500	0	0	0	0	20	0	250	270	0	40	71	1																		
4	18	62	2700	0	20	80	20	110	0	2150	360	950	510	71	4	68	3	88	1														
5	8	62	34400	80	330	7180	0	2070	210	18920	5590	6500	990	71	7	69	6	92	5	25	4	88	4	24	4	51	4	38	4	68	3	91	2
5	22	62	4100	0	20	170	0	80	20	1950	1900	350	100	71	4	88	3	92	3	68	1												
6	5	62	1000	0	0	20	0	80	80	290	480	20	20																				
6	19	62	2400	0	40	0	60	120	0	730	1470	330	150	71	2	88	2	69	1	92	1												
7	3	62	1800	0	0	170	0	410	20	560	680	270	100	71	2	57	2	88	1	92	1												
7	16	62	2200	0	0	40	0	170	0	970	970	200	340	71	3	88	2	69	2														
7	30	62	6600	0	0	20	0	110	0	3760	2740	680	590	71	5	88	3	68	3	69	2	87	2	92	1	91	1						
8	21	62	4700	40	0	560	60	520	60	2440	1040	910	290	71	3	69	3	68	3	51	2	88	2	38	1	87	1						
9	5	62	1900	0	0	0	0	250	0	640	1040	0	0	69	2	88	2	51	1	87	1	71	1										
9	18	62	3400	40	0	520	0	270	0	1370	1160	1450	170	71	3	88	2	68	2	38	2	51	1	69	1								

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MISSOURI
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
MISSOURI CITY, MISSOURI 108

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
1	29	62										540	0	0											0							0	0
3	6	62										20	0	0											0							0	0
3	20	62	71	28	86	10	46	8	92	6	48	270	0	0											0							0	0
4	3	62	71	30	92	15	26	9	73	5	41	0	0	0											0							1	0
4	18	62	82	10	71	9	70	6	48	5	70	0	0	1											0							0	0
5	8	62	80	68	92	8	9	7	71	4	13	0	0	50	11	4	2	1							11	76	2	50	1			3	0
5	22	62	9	36	71	17	92	14	80	13	20	0	0	0											0							0	0
6	5	62	71	14	9	16	80	12	92	11	47	40	0	0											0							0	0
6	19	62	9	34	92	8	71	8	80	6	44	0	0	-											-							-	-
7	3	62	92	27	71	24	80	11	47	7	31	0	0	-											-							-	-
7	16	62	58	29	71	16	92	8	80	5	42	0	0	-											-							-	-
7	30	62	58	34	80	18	71	7	46	6	35	0	0	-											-							-	-
8	21	62	58	57	26	19	80	14	56	3	7	0	0	-											-							-	-
9	5	62	58	22	71	16	92	6	65	4	52	0	0	-											-							-	-
9	18	62	80	26	26	14	82	13	58	13	34	0	0	-											-							-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MISSOURI
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
MISSOURI CITY, MISSOURI 108

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
2	20	62	-	-	-	-	-	-	-	-	20	126	220	10	600	73	.1	323	-
2	27	62	-	-	-	-	-	-	-	-	27	194	256	-	220	95	.3	442	-
3	6	62	-	-	7.1	-	-	-	-	-	31	-	296	10	120	125	.2	479	-
3	13	62	-	-	-	-	-	-	-	-	18	-	-	-	-	65	.3	-	-
3	20	62	-	-	-	-	-	-	-	-	20	176	236	-	280	80	.2	347	-
3	27	62	-	-	-	-	-	-	-	-	13	144	196	-	-	60	.1	294	-
4	3	62	-	-	-	-	-	-	-	-	9	76	124	10	-	50	.0	237	-
5	29	62	-	-	7.6	-	-	-	-	-	13	168	208	20	0	80	.2	321	-
6	5	62	-	-	7.5	-	-	-	-	-	12	172	204	20	0	60	.0	303	-
6	12	62	-	-	7.3	-	-	-	-	-	11	156	184	25	0	65	.0	283	-
6	19	62	-	-	7.1	-	-	-	-	-	16	184	224	25	0	100	-	366	-
6	25	62	-	-	7.7	-	-	-	-	.2	15	150	212	20	0	95	.3	336	-
7	3	62	-	-	7.1	-	-	-	-	-	15	166	240	-	-	125	.3	417	-
7	16	62	-	-	-	-	-	-	-	-	19	156	208	10	500	105	.2	359	-
7	23	62	-	-	-	-	-	-	-	-	17	168	216	20	800	125	.1	395	-
7	30	62	-	-	-	-	-	-	-	-	18	172	228	10	800	135	.4	426	-
8	6	62	-	-	7.8	-	-	-	-	-	19	186	244	-	-	120	.1	393	-
8	14	62	-	-	-	-	-	-	-	-	20	174	252	10	-	140	.0	451	-
8	21	62	-	-	-	-	-	-	-	-	22	176	252	10	-	170	.2	468	-
8	28	62	-	-	-	-	-	-	-	-	21	160	252	5	-	170	.3	484	-
9	5	62	-	-	-	-	-	-	-	-	16	144	196	10	5000	125	.2	358	-
9	11	62	-	-	-	-	-	-	-	-	20	176	252	10	450	155	.2	451	-
9	18	62	-	-	-	-	-	-	-	-	19	176	256	10	5000	165	.2	470	-
9	25	62	-	-	7.7	-	-	-	-	-	19	156	200	10	5000	130	.2	417	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Kansas City, Missouri
Operated by U.S. Geological Survey

STATE	Missouri
MAJOR BASIN	Missouri River
MINOR BASIN	Lower Missouri below Niobrara River
STATION LOCATION	Missouri River at Missouri City, Missouri

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	80.000	70.000	29.300	23.200	75.200	24.700	150.000	47.000	94.800	68.200	54.900	56.800
2	67.800	93.000	29.300	23.800	82.500	22.100	147.000	44.600	76.600	69.100	51.600	79.000
3	62.000	95.400	29.100	23.800	78.100	22.300	143.000	42.000	71.400	65.500	49.100	58.800
4	57.200	82.000	29.300	24.300	98.400	24.900	130.000	40.400	84.500	63.300	46.000	46.600
5	55.300	68.600	28.200	25.200	93.000	26.500	120.000	40.100	105.000	61.600	45.600	45.600
6	49.800	56.000	27.900	23.800	79.000	26.300	112.000	40.100	93.600	59.600	49.100	49.800
7	47.000	47.400	27.500	24.300	66.400	26.300	107.000	39.800	89.400	61.600	50.200	49.800
8	44.200	39.800	26.500	25.600	55.600	27.200	101.000	40.100	92.400	66.400	51.200	47.700
9	43.300	34.000	25.800	24.500	55.300	33.000	96.000	38.900	92.400	67.300	48.400	47.000
10	45.600	31.200	25.800	22.700	56.800	35.300	95.400	38.000	96.600	66.000	46.300	44.600
11	91.200	30.000	27.000	21.000	54.900	51.900	91.800	38.000	112.000	66.000	45.600	45.200
12	112.000	29.800	24.900	20.000	54.200	60.000	82.500	37.500	102.000	62.900	47.700	44.600
13	101.000	37.200	17.500	19.800	56.400	67.300	79.000	37.200	94.200	60.800	47.000	43.300
14	96.600	35.300	14.800	20.000	56.000	53.000	76.600	37.500	84.000	61.200	42.600	43.600
15	74.800	34.200	14.100	20.200	62.000	47.400	71.400	37.800	77.600	60.800	39.500	44.900
16	66.400	69.100	14.400	20.500	79.000	46.000	65.500	38.600	73.300	65.000	38.300	46.600
17	55.600	97.800	15.600	20.500	71.400	44.600	61.200	37.200	69.100	64.600	37.800	45.200
18	46.300	74.300	16.300	20.500	66.400	41.000	56.400	35.800	64.200	61.200	38.300	42.000
19	35.800	67.800	17.500	19.300	70.000	40.100	51.900	37.200	62.000	61.600	38.300	42.300
20	32.700	60.400	17.900	18.000	62.900	56.400	49.100	49.800	69.600	70.500	39.200	40.700
21	34.500	53.400	20.400	17.000	54.900	87.800	47.700	49.400	79.000	107.000	38.000	39.800
22	31.200	47.700	22.500	16.500	47.000	104.000	49.100	50.200	73.800	99.600	38.300	41.000
23	27.900	43.000	21.700	16.500	41.600	96.000	47.700	58.700	74.800	103.000	38.000	44.600
24	25.800	39.800	20.600	16.500	37.800	98.400	48.400	56.000	82.000	91.800	45.600	54.900
25	25.200	38.000	20.800	16.500	35.300	110.000	48.400	58.800	81.000	74.300	56.800	66.000
26	24.700	36.700	22.100	17.000	35.000	116.000	45.600	56.000	80.500	67.300	49.400	57.200
27	24.000	35.800	22.700	18.000	32.400	124.000	44.600	52.600	73.300	62.500	44.200	56.400
28	23.800	34.800	23.200	20.000	25.200	146.000	44.900	58.400	71.000	54.900	41.600	47.700
29	23.600	33.900	22.900	36.000		146.000	44.900	106.000	68.600	51.600	39.500	42.600
30	49.400	30.500	22.700	57.600		141.000	47.400	162.000	67.300	58.800	38.300	42.600
31	75.200		22.900	66.000		146.000		144.000		57.600	38.300	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE KANSAS
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
KANSAS CITY, KANSAS 29

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	23	-	-	-	-	-	-	212	98	17	13	229	99						
10	9	61	10	25	-	-	-	-	-	-	28	19	16	15	44	24						
10	16	61	10	31	5	5	2	2	7	5	39	14	20	10	59	17						
10	23	61	11	2	3	2	5	3	8	4	29	15	19	14	48	21						
10	30	61	11	9	-	-	-	-	-	-	42	12	26	8	68	14						
11	6	61	11	22	3	2	4	3	7	4	117	14	93	15	210	21						
11	13	61	11	28	-	-	-	-	-	-	25	13	68	15	93	20						
11	20	61	11	30	2	3	2	2	4	4	160	11	63	7	223	13						
11	27	61	12	5	-	-	-	-	-	-	82	19	57	16	139	25						
12	4	61	12	12	-	-	-	-	-	-	20	11	33	12	53	16						
12	12	61	12	21	-	-	-	-	-	-	23	15	23	15	46	21						
12	18	61	12	26	1	2	1	2	2	3	28	10	14	9	42	13						
1	2	62	1	10	-	-	-	-	-	-	0	12	2	14	2	18						
1	15	62	1	22	1	1	7	4	8	4	49	11	29	11	78	16						
1	22	62	1	31	-	-	-	-	-	-	2	11	21	14	23	18						
1	30	62	2	12	-	-	-	-	-	-	58	16	42	14	100	21						
2	5	62	2	14	-	-	-	-	-	-	166	15	40	8	206	17						
2	12	62	2	20	-	-	-	-	-	-	62	14	41	11	103	18						
2	19	62	3	5	12	8	3	3	15	9	119	18	37	11	156	21						
2	26	62	3	9	-	-	-	-	-	-	53	12	11	7	64	14						
3	5	62	3	16	-	-	-	-	-	-	12	12	44	15	56	19						
3	12	62	3	23	-	-	-	-	-	-	161	18	41	14	202	23						
3	19	62	3	30	9	7	4	3	13	8	86	17	53	11	139	20						
3	26	62	4	4	-	-	-	-	-	-	279	58	56	9	335	59						
4	2	62	4	13	-	-	-	-	-	-	473	85	60	9	533	85						
4	16	62	4	30	-	-	-	-	-	-	81	21	54	14	135	25						
4	23	62	6	15	-	-	-	-	-	-	66	20	87	16	153	26						
4	30	62	6	1	-	-	-	-	-	-	40	20	34	17	74	26						
5	7	62	6	8	-	-	-	-	-	-	43	17	22	17	65	24						
5	14	62	6	18	-	-	-	-	-	-	33	12	26	19	59	27						
5	21	62	6	25	35	21	3	3	38	21	246	34	40	9	286	35						
5	28	62	6	28	-	-	-	-	-	-	410	64	60	15	470	66						
6	4	62	7	3	-	-	-	-	-	-	311	97	38	13	349	98						
6	12	62	6	12	-	-	-	-	-	-	640	129	45	10	685	129						
6	19	62	7	16	0	3	0	1	0	3	103	73	53	16	156	75						
6	25	62	7	19	-	-	-	-	-	-	144	71	36	14	180	72						
7	2	62	7	30	-	-	-	-	-	-	19	57	9	9	28	58						
7	9	62	8	6	-	-	-	-	-	-	56	84	49	18	105	86						
7	23	62	8	14	9	7	3	2	12	7	166	30	56	18	222	35						
7	30	62	8	22	-	-	-	-	-	-	64	20	44	15	108	25						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE KANSAS

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT

KANSAS CITY, KANSAS 29

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO	DAY	YR	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	6	62	8	28	–	–	–	–	–	–	61	19	55	15	116	24						
8	13	62	8	30	–	–	–	–	–	–	64	67	36	15	100	69						
8	20	62	9	4	4	7	4	3	8	8	65	56	38	14	103	58						
8	27	62	9	25	–	–	–	–	–	–	30	39	33	18	63	43						
9	4	62	10	2	–	–	–	–	–	–	162	93	36	15	198	94						
9	10	62	10	4	–	–	–	–	–	–	89	76	28	17	117	78						
9	17	62	10	10	3	7	3	3	6	8	37	64	34	16	71	66						
9	24	62	10	17	–	–	–	–	–	–	76	19	41	16	117	25						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE KANSAS
MAJOR BASIN MISSOURI PIVEP
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
KANSAS CITY, KANSAS 29

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	300	0	0	20	0	70	0	70	200	20	400																				
10	16	61	1300	0	0	100	0	60	0	370	810	20	460	71	2	88	1																
11	6	61	2200	0	20	150	0	170	0	970	930	120	210	68	3	87	1	88	1	71	1												
11	20	61	1200	0	0	20	0	40	0	540	580	40	270	71	2	92	1																
12	4	61	2100	0	0	0	0	190	0	1350	580	100	520	71	4	92	1																
12	18	61	2000	0	20	160	0	110	0	1590	90	180	130	71	4																		
1	2	62	1100	0	0	90	0	160	50	520	290	200	50	68	2																		
1	15	62	300	0	0	20	0	60	0	60	120	40	20																				
2	5	62	500	0	0	0	0	50	0	20	420	0	220	88	1	91	1																
2	19	62	900	0	0	50	0	70	0	50	770	50	290	87	1																		
3	5	62	500	0	0	0	0	90	90	130	190	40	40																				
3	19	62	400	0	0	0	0	20	0	70	270	20	70	88	1																		
4	2	62	400	0	0	0	0	0	0	60	370	40	20																				
4	16	62	1400	20	0	20	0	270	40	460	620	60	120	68	1	88	1																
5	7	62	24800	40	40	5340	0	3600	170	9770	5800	5220	1700	71	6	51	5	92	4	25	4	24	4	88	4	38	3	45	2	91	2	82	2
5	21	62	1800	0	0	0	0	150	0	550	1140	130	380	88	3	71	2	92	1														
6	4	62	500	0	20	0	0	60	0	80	370	0	0																				
6	12	62	500	0	0	0	0	0	0	60	410	40	20																				
7	2	62	1900	20	0	480	40	210	60	370	700	270	350	38	2	51	1	68	1	71	1												
7	16	62	3800	0	0	0	0	170	20	1650	1980	170	630	69	3	88	3	68	1														
8	6	62	3700	0	0	640	0	500	0	1280	1330	910	700	71	3	88	2	38	2	68	2	69	2										
8	27	62	4400	0	0	540	0	210	0	2570	1080	1080	40	71	4	69	3	88	2	68	1	38	1	86	1								
9	4	62	300	0	0	0	0	0	0	210	80	0	40																				
9	17	62	4800	40	80	1160	40	330	0	1860	1280	1660	370	71	3	26	3	88	2	68	2	87	2	51	1	69	1	38	1				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE KANSAS

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT

KANSAS CITY, KANSAS 029

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																		NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			ROTIFERS											CRUSTACEA								
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61										20	0	0											0							0	0
10	16	61	71	19	46	14	80	10	55	3	54	0	0	0											0							0	0
11	6	61										0	0	0											0							0	0
11	20	61										0	0	3											0							0	0
12	4	61										40	0	0											0							0	0
12	18	61										0	0	3											0							0	0
1	2	62										160	0	0											0							0	0
1	15	62	71	16	46	15	80	11	86	9	49	20	0	1											0							1	0
2	5	62										20	0	0											0							0	0
2	19	62										0	0	0											0							0	0
3	5	62										0	0	0											0							0	0
3	19	62	86	14	71	13	48	9	65	9	55	20	0	0											0							0	0
4	2	62	71	22	26	11	46	6	78	5	56	0	0	0											0							0	0
4	16	62	26	14	46	12	71	10	80	9	55	60	0	0											0							0	0
5	7	62	80	48	82	12	92	10	9	5	25	0	0	11	2	1									16	76	2	50	1			0	0
5	21	62	71	32	9	28	92	11	80	7	22	0	0	0											0							0	0
6	4	62	9	49	71	11	92	8	80	7	25	20	0	0											0							0	0
6	12	62	71	15	46	13	92	10	73	6	54	20	0	-											-							-	-
7	2	62	92	14	71	12	46	8	58	7	59	0	0	0											4	76	1					0	0
7	16	62	71	23	58	16	92	7	65	5	49	170	0	-											-							-	-
8	6	62	58	33	80	12	26	7	71	6	42	40	0	-											-							-	-
8	27	62	58	64	80	23	26	4	56	1	8	0	0	0											0							0	0
9	4	62	58	12	71	7	65	7	26	5	69	-	-	-											-							-	-
9	17	62	80	24	26	17	82	11	58	10	38	40	0	-											-							-	-

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE KANSAS
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
KANSAS CITY, KANSAS 29

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	5	61	10	19	3752	135	25	110	0	5	10	2	1	6	1	3	1	1	5
10	24	61	11	6	3491	143	40	103	1	10	13	2	1	9	1	4	3	1	8
11	9	61	11	24	4539	100	19	81	0	2	10	2	1	7	0	2	1	1	3
11	30	61	12	14	4820	114	21	93	0	5	9	2	1	6	0	3	2	0	2
12	14	61	12	29	4865	154	29	125	1	6	12	2	2	8	0	4	1	1	4
1	4	62	1	18	5196	136	29	107	1	4	12	2	2	8	0	4	2	1	5
1	22	62	2	5	5333	175	37	138	1	7	16	2	2	11	1	5	2	1	5
2	20	62	3	11	4993	164	29	135	0	6	11	1	1	7	2	4	1	0	7
3	12	62	3	27	4866	91	25	66	0	3	13	2	1	9	1	3	1	0	5
4	3	62	4	18	4825	117	45	72	1	11	17	2	1	14	0	5	3	1	7
4	24	62	5	8	5605	81	36	45	2	10	10	2	1	7	0	4	3	1	6
5	22	62	6	6	3917	80	25	55	0	6	10	2	1	6	1	3	2	1	3
6	7	62	6	22	4769	52	18	34	1	5	6	2	1	3	0	2	1	0	3
7	17	62	7	30	4094	55	16	39	0	3	7	2	1	4	0	2	1	0	3
7	30	62	8	13	4845	75	27	48	1	7	7	1	1	5	0	4	4	1	3
8	20	62	9	3	4818	84	33	51	1	8	9	2	1	6	0	3	2	1	9
9	6	62	9	20	4611	73	18	55	1	6	6	1	1	4	0	2	1	0	2

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE KANSAS

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT

KANSAS CITY, KANSAS 29

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	13.7	6.9	7.8	2.4	110	.8	3.9	.1	12	125	162	8	2600	144	.5	310	80000
10	9	61	16.5	8.2	7.9	1.9	19	2.0	-	.5	18	173	234	4	250	174	.2	485	10000
10	23	61	13.5	8.7	7.9	2.7	18	2.1	7.0	.1	22	208	270	7	250	125	.2	459	12000
10	30	61	14.4	5.1	7.9	7.2	188	1.0	3.8	.2	19	179	236	7	4500	109	.2	375	14000
11	6	61	7.8	9.2	7.8	3.9	44	3.9	10.9	.1	14	152	181	8	650	71	.4	307	15000
11	13	61	9.0	9.7	7.9	-	25	2.6	7.0	.1	25	205	262	3	340	109	.4	431	11000
11	27	61	5.7	10.6	7.9	3.4	19	2.6	7.0	.1	29	204	255	5	290	99	.4	414	25000
12	4	61	7.2	10.6	8.0	3.0	17	2.4	-	.2	23	218	272	2	150	110	.4	472	3300
12	11	61	.0	12.5	8.0	3.3	16	2.6	5.0	.2	25	210	277	4	135	115	.4	452	3700
12	18	61	.0	12.0	7.9	2.6	14	.5	6.9	.4	21	268	327	1	65	102	.4	485	16000
1	2	62	.0	11.8	7.8	1.7	11	.6	6.8	.4	26	194	284	2	50	130	.3	478	3300
1	8	62	.0	11.6	7.9	2.3	18	.3	-	.5	26	209	263	2	55	144	.4	452	11000
1	15	62	.0	11.9	7.8	2.3	13	.5	6.2	.5	21	223	303	2	50	125	.4	514	9700
1	22	62	.0	11.7	7.7	2.7	9	.4	5.0	.4	26	220	304	2	25	172	.4	541	5200
1	30	62	.0	10.4	7.7	5.8	30	.9	10.0	.4	18	163	214	2	440	113	.4	381	2500
2	5	62	.6	10.6	7.7	5.6	75	.9	7.7	.4	13	143	168	8	1500	76	.3	303	11000
2	12	62	1.9	11.1	7.6	4.2	25	1.3	15.0	.5	18	160	-	3	300	86	.3	320	-
2	19	62	.8	11.1	7.8	5.8	56	.8	9.7	.4	19	143	192	7	850	85	.4	334	13000
2	26	62	.0	11.9	7.7	3.7	23	.6	8.9	.4	17	185	248	8	210	103	.4	402	4500
3	5	62	.1	12.3	8.0	1.8	42	.4	5.9	.5	11	224	284	[illegible]	45	126	.4	472	620
3	12	62	2.1	11.1	7.9	5.1	52	.2	-	.4	20	179	227	3	700	96	.4	390	10000
3	26	62	3.8	8.6	7.8	5.3	130	1.1	11.5	.3	13	124	162	3	2500	72	.2	266	7500
4	2	62	4.4	9.0	7.8	6.1	90	.9	14.9	.7	11	106	13	8	1700	49	.2	212	3300
4	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9800
4	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44000
4	30	62	17.1	7.0	7.9	2.5	29	2.9	7.7	.3	14	160	229	8	310	103	-	368	16000
5	14	62	21.6	7.1	8.1	2.4	29	2.6	8.9	.1	16	188	263	6	240	160	.4	487	11000
5	21	62	23.2	4.9	7.9	3.4	126	.8	4.8	.9	15	176	250	6	2200	158	.3	466	33000
5	23	62	14.4	7.9	7.9	3.2	34	3.9	9.4	.3	13	161	233	7	430	96	-	357	-
5	28	62	21.3	5.7	7.8	3.3	253	.0	4.0	.0	11	142	192	8	4000	107	-	334	-
6	19	62	25.3	5.1	8.0	2.2	53	-	-	.4	14	174	239	11	800	111	-	398	21000
6	25	62	25.6	4.8	7.7	2.5	85	1.9	8.9	.1	11	154	215	17	1300	107	-	344	28000
7	10	62	28.0	5.1	7.9	1.5	35	-	-	.0	14	171	248	9	500	155	-	451	26000
7	16	62	27.1	3.6	7.8	2.6	58	3.0	11.0	.0	14	162	221	7	1500	118	-	382	28000
7	23	62	26.6	3.9	7.8	2.4	131	.6	3.9	.0	20	154	221	8	3200	126	-	410	47000
7	30	62	24.7	5.8	8.0	2.0	61	1.9	-	.0	15	170	248	7	800	138	.7	439	29000
8	6	62	27.6	5.5	7.9	1.6	54	2.9	7.0	.0	15	174	257	8	500	141	.5	451	20000
8	13	62	26.7	6.0	7.9	-	60	2.9	9.0	.0	16	172	253	7	800	159	-	466	26000
8	20	62	25.3	6.4	8.0	1.7	49	2.5	9.4	.0	19	173	258	7	380	175	.6	492	250000

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE KANSAS

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT

KANSAS CITY, KANSAS 29

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	27	62	24.3	6.1	7.9	1.7	42	2.1	10.0	.0	18	166	263	9	360	184	.5	521	19000
9	4	62	21.5	5.5	7.8	2.6	153	1.8	14.6	.0	18	130	186	11	2200	127	.5	362	100000
9	10	62	18.6	7.3	8.1	2.4	59	3.3	6.8	.0	13	164	250	6	650	168	.5	465	38000
9	17	62	22.9	6.5	8.0	2.0	52	2.6	8.0	.0	15	176	267	7	420	181	.5	496	19000
9	24	62	18.4	7.5	8.0	2.5	45	3.0	5.8	.0	18	168	315	6	340	187	.3	504	78000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Kansas City, Kansas
Operated by U.S. Geological Survey

STATE	Kansas
MAJOR BASIN	Missouri River
MINOR BASIN	Lower Missouri below Niobrara River
STATION LOCATION	Missouri River at Kansas City, Kansas

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	71.500	40.000	21.800	18.800	31.200	19.600	140.000	41.100	73.500	52.000	45.100	52.300
2	59.800	48.100	22.100	19.300	37.500	16.800	139.000	39.000	59.100	53.500	41.800	72.600
3	54.200	48.000	22.000	19.100	32.900	16.800	133.000	36.800	54.900	51.200	39.400	53.400
4	45.100	47.200	22.700	19.400	57.800	18.300	120.000	35.600	47.500	50.900	36.200	41.800
5	42.700	47.100	22.100	20.300	55.700	18.800	112.000	35.400	58.900	50.800	33.500	41.000
6	40.100	41.700	21.800	18.900	49.000	19.100	104.000	35.600	59.500	50.200	35.400	44.600
7	38.700	36.400	21.600	19.500	44.400	19.300	96.100	35.700	56.400	51.200	36.200	44.800
8	37.300	30.000	20.800	20.800	35.700	19.000	87.900	36.100	64.100	54.400	37.000	42.000
9	36.800	24.900	20.400	19.800	39.300	22.500	83.400	35.300	65.000	54.800	36.400	38.800
10	37.900	22.800	20.100	18.100	42.500	26.100	83.600	34.200	69.800	53.300	36.800	38.300
11	59.800	22.000	19.600	16.600	41.300	44.000	82.300	33.900	89.300	52.800	36.100	39.300
12	64.000	22.000	19.200	15.700	40.800	48.400	75.300	33.400	83.100	50.500	37.500	39.100
13	63.000	24.500	13.900	15.100	43.300	56.200	72.100	33.000	76.400	48.400	37.500	38.600
14	54.500	26.800	11.000	15.000	44.000	44.[illegible]00	69.300	33.400	66.700	48.000	34.600	39.500
15	48.200	25.000	10.200	15.000	50.600	39.700	64.000	34.300	60.700	46.100	32.500	38.600
16	44.900	43.500	10.200	15.300	66.000	38.100	58.500	35.000	56.900	51.400	32.100	39.300
17	37.600	64.300	11.300	15.300	58.800	36.400	54.400	33.700	54.300	50.200	31.800	40.000
18	32.900	50.600	11.500	15.500	52.900	32.800	49.800	32.600	51.700	47.000	32.500	37.600
19	27.500	46.400	12.400	14.700	55.500	31.800	46.300	33.900	50.500	48.000	32.600	38.200
20	22.900	43.700	12.600	13.700	51.700	46.100	43.300	46.000	59.000	52.200	33.800	36.700
21	22.800	39.800	15.200	12.800	44.800	61.600	41.700	44.000	68.900	81.200	32.800	35.500
22	23.200	35.800	17.500	12.300	37.100	68.800	42.900	46.300	64.400	79.600	33.200	34.400
23	21.600	32.300	16.600	12.200	32.200	74.200	41.500	54.900	65.100	85.600	33.200	37.100
24	20.200	30.100	15.500	12.100	28.400	83.000	42.200	52.000	71.400	76.100	37.200	35.800
25	19.600	29.200	15.800	11.800	26.200	92.200	42.300	53.900	67.100	61.600	43.000	37.700
26	19.300	28.100	17.400	10.000	26.200	97.100	39.500	51.100	61.700	53.100	41.700	35.900
27	18.800	26.700	18.100	8.000	24.700	97.400	38.600	48.200	56.800	48.500	37.900	36.200
28	18.500	26.000	18.700	2.000	19.400	113.000	39.000	53.100	55.100	42.000	34.500	36.700
29	18.200	25.800	18.400	4.000		121.000	39.200	89.600	52.800	40.500	33.200	34.900
30	34.800	22.800	18.300	23.600		124.000	41.100	103.000	51.000	48.400	33.400	35.900
31	33.400		18.500	27.000		134.000		104.000		47.600	33.700	

Computed as sum of Missouri River at Kansas City, Missouri minus the sum of Kansas River at Bonner Springs, Kansas.

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	MISSOURI
MAJOR BASIN	MISSOURI RIVER
MINOR BASIN	LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION	MISSOURI RIVER AT ST. JOSEPH, MISSOURI 30

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	5	61	10	16	-	-	-	-	-	-	39	16	29	12	68	20						
10	9	61	10	27	-	-	-	-	-	-	36	18	28	14	64	23						
10	16	61	10	25	-	-	-	-	-	-	59	18	29	11	88	21						
10	23	61	11	2	3	4	4	3	7	5	23	13	24	12	47	18						
10	30	61	11	6	-	-	-	-	-	-	14	17	35	14	49	22						
11	6	61	11	17	2	4	5	3	7	5	228	21	167	17	395	27						
12	5	61	12	18	-	-	-	-	-	-	16	15	23	15	39	21						
12	18	61	1	2	-	-	-	-	-	-	8	12	26	15	34	19						
12	25	61	1	3	0	1	5	4	5	4	9	9	30	11	39	14						
1	2	62	1	15	-	-	-	-	-	-	16	12	30	15	46	19						
1	8	62	1	24	-	-	-	-	-	-	5	11	25	14	30	18						
1	15	62	1	25	-	-	-	-	-	-	0	11	25	15	25	19						
1	22	62	2	2	0	1	7	4	7	4	8	11	31	15	39	19						
1	31	62	2	13	-	-	-	-	-	-	64	19	53	15	117	24						
2	6	62	2	19	-	-	-	-	-	-	114	15	16	5	130	16						
2	19	62	3	6	-	-	-	-	-	-	181	31	43	14	225	34						
2	26	62	3	9	0	2	0	2	0	3	47	12	39	11	86	16						
3	5	62	3	19	-	-	-	-	-	-	18	12	26	14	44	18						
3	13	62	3	26	-	-	-	-	-	-	362	57	48	9	410	58						
3	19	62	4	3	-	-	-	-	-	-	136	24	39	14	175	28						
3	26	62	4	5	8	5	2	2	10	5	55	9	64	7	119	11						
4	2	62	4	13	-	-	-	-	-	-	422	91	52	8	474	91						
4	9	62	4	20	-	-	-	-	-	-	133	25	98	9	231	27						
4	16	62	4	30	-	-	-	-	-	-	86	22	46	14	132	26						
4	23	62	5	25	8	4	2	2	10	4	28	16	59	14	87	21						
4	30	62	6	1	-	-	-	-	-	-	47	25	25	16	72	30						
5	7	62	6	5	-	-	-	-	-	-	44	20	54	18	98	27						
5	14	62	6	20	-	-	-	-	-	-	22	19	35	18	57	26						
5	21	62	6	26	-	-	-	-	-	-	63	18	27	14	90	23						
5	28	62	6	28	41	1	2	1	43	1	621	62	51	14	672	64						
6	4	62	7	2	-	-	-	-	-	-	286	100	46	14	332	101						
6	11	62	7	9	-	-	-	-	-	-	736	135	43	9	779	135						
6	18	62	7	10	-	-	-	-	-	-	565	88	61	15	626	89						
6	26	62	7	27	27	86	2	2	29	86	106	29	54	17	160	34						
7	2	62	8	6	-	-	-	-	-	-	103	60	45	12	148	61						
7	9	62	8	13	-	-	-	-	-	-	65	3	46	11	111	11						
7	16	62	8	14	-	-	-	-	-	-	102	26	63	15	165	30						
7	23	62	8	20	1	1	0	1	1	1	25	6	40	7	65	9						
7	29	62	8	22	-	-	-	-	-	-	275	104	35	14	310	105						
8	6	62	8	28	-	-	-	-	-	-	56	21	45	15	101	26						
8	13	62	8	29	-	-	-	-	-	-	111	68	51	15	162	70						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MISSOURI
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
ST. JOSEPH, MISSOURI 30

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	20	62	9	5	–	–	–	–	–	–	41	66	85	20	126	69						
8	27	62	9	19	4	7	5	4	9	8	336	80	57	20	393	82						
9	4	62	10	2	–	–	–	–	–	–	275	149	36	15	311	150						
9	10	62	10	8	–	–	–	–	–	–	135	76	50	15	185	78						
9	17	62	10	9	–	–	–	–	–	–	138	71	33	15	171	73						
9	21	62	10	16	5	4	3	3	8	5	29	18	75	17	104	25						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MISSOURI
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
ST. JOSEPH, MISSOURI 30

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	600	0	0	20	0	20	20	310	270	250	420	71	1																		
10	16	61	4100	0	0	270	0	230	0	1640	1990	290	730																				
11	7	61	2600	0	0	90	0	180	20	1610	670	630	870	71	4	57	1	84	1														
11	14	61	4700	20	20	210	0	290	0	3020	1120	330	290	92	2	57	1	97	1														
12	4	61	3200	0	20	110	0	200	90	2370	420	470	690	71	4	57	1																
12	18	61	600	0	0	0	0	100	0	270	250	100	100	71	1																		
1	2	62	700	0	0	0	0	90	0	580	20	50	50	71	2																		
1	15	62	400	0	0	0	0	20	0	270	60	0	0	71	1																		
2	4	62	1100	0	0	20	0	0	0	100	1010	0	150	91	2	88	1																
2	19	62	500	0	0	20	0	20	0	0	490	0	620																				
3	5	62	500	0	0	0	0	40	230	100	100	40	100	63	1																		
3	19	62	300	0	0	20	0	20	0	50	230	0	90	88	1																		
4	2	62	1000	0	0	20	0	0	0	270	660	20	230	68	1	88	1																
4	16	62	1400	0	0	50	0	200	0	840	290	140	290	68	1	71	1																
5	9	62	8100	0	0	1200	0	80	60	3560	3210	1350	290	71	4	73	3	92	3	38	2	68	2	25	2	91	2	77	1	88	1		
5	21	62	18100	20	540	2630	0	910	0	7950	6040	3020	250	71	6	92	4	77	4	38	4	88	3	68	3	91	3	25	3	51	2	11	2
6	6	62	2200	0	20	60	0	20	60	190	1840	0	210	77	2	92	2	88	2														
6	20	62	1600	0	0	150	0	310	0	370	770	60	40	57	1	71	1	88	1	69	1												
7	2	62	700	50	90	130	0	50	0	290	90	50	50																				
7	16	62	1100	0	40	100	40	190	0	410	330	40	40	69	1	71	1																
8	6	62	4300	100	0	520	0	270	20	2070	1300	1490	330	71	3	68	2	69	2	38	2	88	1	51	1								
8	20	62	7000	270	0	1660	0	750	80	3190	1040	1620	370	71	4	69	3	68	3	38	3	51	3	88	2	25	1	3	1	29	1	24	1
9	3	62	800	40	0	0	0	40	0	330	410	40	40	88	1	68	1	69	1														
9	17	62	9200	80	40	1780	210	660	0	4200	2190	3110	540	71	5	68	3	38	3	51	3	25	2	88	2	69	1	24	1	50	1	87	1

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	MISSOURI
MAJOR BASIN	MISSOURI RIVER
MINOR BASIN	LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION	MISSOURI RIVER AT ST. JOSEPH, MISSOURI 030

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA								
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)						NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	4	61										20	0	0											0							0	0
10	16	61	46	13	71	12	78	7	74	6	62	0	0	0											0							2	0
11	7	61	92	15	71	15	46	13	80	8	49	0	0	1											0							0	0
11	14	61	92	33	46	10	47	10	78	9	38	0	0	0											0							0	0
12	4	61	46	19	71	9	92	9	78	9	54	50	0	0											1							1	0
12	18	61	46	37	80	14	71	5	78	4	40	0	0	0											0							2	0
1	2	62	46	16	80	9	71	8	92	7	60	0	0	13	21	1									0							0	0
1	15	62										0	0	1											2							0	0
2	4	62										0	0	0											0							0	0
2	19	62										20	0	0											0							0	0
3	5	62										150	0	0											0							0	0
3	19	62	71	29	48	9	54	6	84	4	52	0	0	0											0							0	0
4	2	62	26	14	71	12	74	8	73	6	60	0	0	0											0							0	0
4	16	62	26	9	80	9	92	8	46	6	68	0	0	0											0							0	0
5	9	62	80	39	92	16	3	15	26	7	23	0	0	0											26	50	3	76	2	77	1	0	0
5	21	62	80	29	9	27	92	11	26	5	28	0	0	34	2	3	11	1							11	76	1	77	1			0	0
6	6	62	92	25	71	24	47	9	48	7	35	0	0	0											0							0	0
6	20	62	9	15	46	13	71	9	92	9	54	100	0	1											4							0	0
7	2	62	71	17	92	15	46	12	26	6	50	70	0	0											0							0	0
7	16	62	58	49	71	10	80	6	92	3	32	0	0	-											-							-	-
8	6	62	58	29	80	16	26	8	56	7	40	0	0	-											-							-	-
8	20	62	58	72	80	7	56	5	26	3	13	20	0	-											-							-	-
9	3	62	65	12	26	11	58	10	92	6	61	0	0	-											-							-	-
9	17	62	80	40	26	18	82	9	58	8	25	0	0	-											-							-	-

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MISSOURI

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT
ST. JOSEPH, MISSOURI 30

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES											
BEGINNING			END								NEUTRALS									
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLOROFORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGENATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	7	61	10	20	5528	112	22	90	0	5	8	1	1	5	1	3	2	1	3
11	20	61	12	7	3247	257	41	216	1	10	16	2	1	13	0	6	2	1	5
1	9	62	1	19	5250	158	25	133	2	7	8	1	1	6	0	3	1	0	4
2	15	62	2	27	4552	163	35	128	1	7	12	1	1	9	1	4	3	0	8

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MISSOURI
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
ST. JOSEPH, MISSOURI 30

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30000
10	9	61	13.8	8.2	7.9	1.5	-	-	-	.1	20	180	224	-	180	-	.2	-	37000
10	16	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43000
10	18	61	15.0	8.1	8.7	1.9	-	-	-	.1	25	192	230	-	430	124	.2	470	-
10	20	61	-	-	-	-	37	-	-	-	-	-	-	-	-	-	-	-	-
10	23	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37000
10	30	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	130000
11	3	61	11.1	7.9	7.7	1.6	-	-	-	.3	30	176	200	-	1000	95	.2	371	-
11	6	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74000
11	14	61	1.1	-	7.9	-	-	-	-	.2	30	216	254	-	160	114	-	472	-
11	21	61	2.8	-	7.9	-	-	-	-	-	35	192	260	-	350	93	-	450	-
11	28	61	5.0	-	-	-	-	-	-	-	30	160	479	-	220	109	-	479	-
12	5	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24000
12	7	61	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-
12	11	61	1.1	11.8	-	-	-	3.5	5.0	.4	30	210	250	-	100	-	.3	-	31000
12	18	61	1.1	10.6	7.7	2.4	-	3.5	5.0	.6	36	270	310	-	35	276	.2	549	1700
12	25	61	1.1	10.0	7.7	2.0	-	3.0	4.5	.5	33	210	260	-	30	-	.2	432	4700
1	3	62	1.1	9.6	7.8	2.2	-	4.0	6.2	.5	37	216	260	-	25	-	.3	-	100
1	9	62	1.1	10.6	7.8	2.7	-	4.6	5.5	.8	30	202	252	0	25	121	.4	468	100
1	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	550
1	17	62	.6	9.7	8.0	8.1	-	3.4	4.8	.3	35	220	276	0	25	160	.2	488	-
1	19	62	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
1	23	62	.6	.8	8.0	2.0	-	3.5	4.8	.4	38	218	274	0	25	162	.1	541	600
1	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1400
2	1	62	1.1	9.8	7.7	2.2	-	4.5	6.5	.5	34	170	212	-	400	115	.3	377	-
2	2	62	1.1	9.4	7.7	2.4	-	4.0	5.5	.4	32	156	196	0	480	100	.1	381	-
2	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39000
2	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700
2	14	62	1.1	8.7	8.4	1.7	-	4.0	5.5	.4	27	156	188	-	300	97	.1	331	-
2	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59000
2	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5100
3	1	62	1.1	-	7.8	2.8	-	4.0	5.8	.4	28	188	236	0	65	103	.2	435	-
3	5	62	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	100
3	7	62	1.1	11.2	7.3	3.2	-	-	-	.3	27	164	252	-	70	123	.1	453	-
3	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
3	14	62	1.6	-	7.7	-	-	4.0	5.6	.4	27	150	176	-	900	80	.1	381	-
3	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16000
3	21	62	4.4	9.8	7.2	2.0	-	3.8	5.6	.3	24	140	160	-	2000	67	.2	273	-
3	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70000

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MISSOURI
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
ST. JOSEPH, MISSOURI 30

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
4	2	62	5.5	-	7.4	-	-	4.6	6.5	.4	23	108	128	-	1700	48	-	-	12000
4	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300
4	17	62	7.2	9.0	7.9	3.0	-	-	-	.4	24	128	152	0	500	-	.3	336	1100
4	23	62	8.5	-	8.2	-	-	-	-	.3	20	168	196	0	400	120	.2	355	800
4	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*200
5	1	62	11.7	-	8.0	-	-	-	-	.3	24	164	212	0	200	-	.1	368	-
5	8	62	-	-	-	-	-	-	-	.4	24	172	244	-	300	128	.1	421	3400
5	14	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6200
5	21	62	24.4	6.8	7.9	-	-	-	-	.3	29	176	252	-	290	168	.2	465	7000
5	29	62	25.0	7.0	7.8	2.8	-	4.0	5.6	.2	25	180	240	-	12000	102	.5	350	-
6	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5500
6	5	62	21.1	7.6	7.9	2.1	-	-	-	.3	24	125	200	-	1830	91	.2	366	-
6	11	62	21.1	6.8	7.6	2.5	-	-	-	.2	23	132	156	-	6000	64	.1	248	95000
6	18	62	21.0	7.8	7.9	2.1	-	-	-	.2	27	174	228	-	800	107	.1	439	7600
6	26	62	26.7	7.0	7.9	2.2	-	-	-	.3	27	176	208	10	850	110	.2	417	28000
7	3	62	26.7	6.6	7.8	2.4	-	-	-	.4	24	164	216	15	1200	99	.1	426	8000
7	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8200
7	11	62	26.7	6.2	8.1	2.9	-	4.4	-	.4	26	196	224	10	460	117	.1	466	-
7	17	62	26.7	6.7	7.9	2.5	-	-	-	.3	24	152	196	-	2750	86	.2	340	15000
7	23	62	25.6	5.7	7.6	2.3	-	-	-	.2	20	142	172	10	3000	98	-	327	6000
7	30	62	25.6	5.2	7.4	2.1	-	-	-	.3	26	168	216	-	2600	117	.2	393	7000
8	6	62	25.0	5.6	7.9	2.5	-	-	-	.3	28	180	248	10	400	143	.1	490	-
8	14	62	25.0	6.1	8.1	2.3	-	-	-	.3	35	172	224	10	700	144	.1	447	10000
8	20	62	25.0	6.2	8.1	2.1	-	-	-	.3	36	174	236	8	260	170	.3	472	1000
8	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12000
9	5	62	22.2	6.9	8.0	3.0	-	-	-	.2	23	164	196	10	2440	134	.1	364	23000
9	10	62	22.0	6.2	8.0	2.7	-	-	-	.3	27	172	232	12	550	169	.1	448	12000
9	20	62	21.6	7.0	8.3	2.2	-	-	-	.3	37	174	232	-	350	181	.1	549	-
9	25	62	21.6	7.4	8.2	2.6	-	-	-	.2	39	170	252	-	300	-	.1	-	57000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at St. Joseph, Missouri
Operated by U.S. Geological Survey

STATE	Missouri
MAJOR BASIN	Missouri River
MINOR BASIN	Lower Missouri below Niobrara River
STATION LOCATION	Missouri River at St. Joseph, Missouri

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	51.600	22.500	18.800	15.800	24.000	19.200	134.000	37.300	59.000	52.400	41.600	79.600
2	46.000	22.500	18.800	16.000	24.000	19.200	134.000	35.100	48.000	52.000	38.200	60.400
3	40.600	24.900	19.000	16.200	27.600	18.500	122.000	33.900	51.200	48.400	37.000	43.000
4	37.000	26.100	18.800	16.200	33.000	18.000	113.000	33.600	60.800	48.000	34.200	37.300
5	34.800	23.200	18.500	16.400	33.900	17.500	108.000	33.600	62.600	47.200	35.400	40.900
6	33.900	20.800	18.700	16.400	29.900	17.500	97.200	33.600	56.800	48.800	37.600	43.400
7	33.600	19.800	17.700	16.600	27.300	17.600	89.600	35.100	56.400	52.400	36.300	41.200
8	33.600	19.400	17.300	16.000	28.000	17.600	84.200	34.500	61.300	55.000	36.000	37.900
9	33.900	19.000	17.300	16.000	29.400	23.500	81.200	33.600	65.500	53.600	35.100	36.000
10	38.900	17.900	17.700	15.200	29.600	27.000	79.000	33.900	97.200	52.800	35.400	37.300
11	68.000	18.100	16.000	13.500	28.600	31.800	45.200	33.600	94.600	50.400	35.700	38.900
12	52.400	18.300	12.600	13.500	31.000	46.400	69.500	33.600	84.200	49.600	36.600	38.200
13	50.800	18.300	8.520	14.100	33.600	37.300	67.000	33.600	70.500	50.400	33.000	35.700
14	36.600	18.300	7.610	15.500	33.000	31.000	62.200	33.600	63.600	47.200	31.000	33.600
15	29.900	18.800	7.940	16.000	42.000	28.600	57.200	34.200	56.800	51.600	30.700	34.500
16	26.300	37.600	8.520	16.800	47.200	28.000	52.800	33.600	53.600	57.200	31.300	36.600
17	23.600	36.600	9.380	16.800	39.600	27.600	48.400	33.300	51.600	48.000	30.400	34.500
18	21.100	27.600	10.300	16.800	42.000	28.000	45.600	33.300	49.200	47.600	31.800	35.700
19	19.600	24.900	11.700	16.600	40.200	34.500	43.700	36.300	53.600	48.400	33.900	35.700
20	19.000	23.400	14.000	15.800	37.600	47.200	41.200	38.600	66.000	66.500	33.000	34.200
21	18.300	22.700	15.700	15.000	33.600	52.800	40.900	38.900	64.500	76.300	33.000	34.200
22	17.900	22.700	15.700	15.200	30.200	52.400	38.600	47.600	59.000	79.600	33.300	34.200
23	17.500	23.000	15.200	15.500	27.300	55.400	38.600	54.600	67.000	84.200	33.000	33.900
24	17.300	23.400	14.800	15.800	25.400	66.000	38.900	53.600	68.000	63.600	37.600	34.800
25	17.300	23.000	15.700	16.200	24.900	87.200	36.600	52.800	63.100	54.100	39.900	34.500
26	17.100	21.900	16.800	17.000	24.000	86.000	34.800	49.600	58.600	48.000	38.900	34.200
27	16.800	20.600	17.700	18.500	21.200	95.300	35.700	48.400	55.900	43.000	35.700	34.500
28	16.600	19.800	17.900	23.800	19.400	102.000	36.000	57.700	52.000	39.900	34.200	33.900
29	17.500	19.200	17.500	23.800		112.000	37.000	124.000	49.600	51.600	33.000	32.700
30	25.400	19.200	16.600	21.700		123.000	37.600	126.000	50.400	50.000	32.700	35.400
31	26.100		15.800	24.000		132.000		81.800		46.400	37.900	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	NEBRASKA
MAJOR BASIN	MISSOURI RIVER
MINOR BASIN	LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION	MISSOURI RIVER AT OMAHA, NEBRASKA 31

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA								DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL						ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±			MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	14	-	-	-	-	-	-	27	17	46	16	73	23								
10	9	61	10	31	-	-	-	-	-	-	6	16	6	15	12	22								
10	16	61	10	31	-	-	-	-	-	-	33	15	32	15	65	21								
10	23	61	11	2	2	1	6	3	8	3	1	9	34	12	35	15								
10	30	61	11	10	-	-	-	-	-	-	13	14	30	15	43	21								
11	6	61	11	27	-	-	-	-	-	-	133	16	71	15	204	22								
11	13	61	11	24	-	-	-	-	-	-	24	10	148	17	172	20								
11	20	61	11	29	-	-	-	-	-	-	19	11	51	16	70	19								
11	27	61	12	7	0	1	2	3	2	3	6	9	41	12	47	15								
12	4	61	12	12	-	-	-	-	-	-	3	12	41	16	44	20								
12	11	61	12	22	-	-	-	-	-	-	1	9	23	12	24	15								
12	18	61	12	27	-	-	-	-	-	-	5	9	25	11	30	14								
12	25	61	1	3	1	1	2	3	3	3	2	11	24	12	26	16								
1	2	62	1	10	-	-	-	-	-	-	6	12	28	15	34	19								
1	8	62	1	19	-	-	-	-	-	-	5	13	10	15	15	20								
1	15	62	1	25	-	-	-	-	-	-	23	16	44	16	67	23								
1	22	62	2	2	0	1	5	4	5	4	4	9	20	12	24	15								
1	29	62	2	6	-	-	-	-	-	-	5	12	16	14	21	18								
2	5	62	2	15	-	-	-	-	-	-	15	13	21	15	36	20								
2	12	62	2	23	-	-	-	-	-	-	3	11	24	15	27	19								
2	19	62	3	5	-	-	-	-	-	-	46	16	65	15	111	22								
2	26	62	3	14	1	1	3	3	4	3	10	12	47	15	57	19								
3	5	62	3	16	-	-	-	-	-	-	11	12	39	15	50	19								
3	12	62	3	30	-	-	-	-	-	-	64	9	94	12	158	15								
3	19	62	4	3	-	-	-	-	-	-	18	10	47	12	65	16								
3	26	62	4	9	41	49	0	3	41	49	532	94	37	8	569	94								
4	2	62	4	19	-	-	-	-	-	-	242	56	61	8	303	57								
4	9	62	4	25	-	-	-	-	-	-	177	46	11	7	188	47								
4	16	62	4	30	-	-	-	-	-	-	38	11	63	9	101	14								
4	23	62	5	23	1	5	2	2	3	5	62	25	38	17	100	30								
4	30	62	6	1	-	-	-	-	-	-	42	20	44	17	86	26								
5	7	62	6	11	-	-	-	-	-	-	20	18	32	18	52	25								
5	14	62	6	21	-	-	-	-	-	-	35	21	30	18	65	28								
5	21	62	7	26	-	-	-	-	-	-	95	67	28	15	123	69								
5	28	62	6	28	39	22	1	2	40	22	287	62	46	15	333	64								
6	4	62	7	2	-	-	-	-	-	-	192	82	55	15	247	83								
6	11	62	7	9	-	-	-	-	-	-	471	102	59	16	530	103								
6	18	62	7	19	-	-	-	-	-	-	296	102	63	15	359	103								
6	25	62	8	14	4	8	2	2	6	8	32	65	106	17	138	67								
7	2	62	7	31	-	-	-	-	-	-	44	24	49	19	93	31								
7	9	62	8	6	-	-	-	-	-	-	102	64	40	12	142	65								

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
OMAHA, NEBRASKA 31

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
NO.	DAY	YR.	NO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	NO.	DAY	μμc/g	±	μμc/g	±
7	16	62	8	23	-	-	-	-	-	-	138	31	46	17	184	35						
7	23	62	8	15	6	8	1	2	7	8	96	25	46	15	142	29						
7	30	62	9	20	-	-	-	-	-	-	70	20	63	15	133	25						
8	6	62	8	17	-	-	-	-	-	-	48	18	43	16	91	24						
8	13	62	8	30	-	-	-	-	-	-	99	65	40	15	139	67						
8	20	62	8	31	-	-	-	-	-	-	45	61	40	16	85	63						
8	27	62	9	13	4	7	6	3	10	8	28	47	42	18	70	50						
9	3	62	9	28	-	-	-	-	-	-	229	156	39	18	268	157						
9	10	62	10	2	-	-	-	-	-	-	18	40	28	18	46	44						
9	17	62	10	9	-	-	-	-	-	-	54	35	35	16	89	38						
9	24	62	10	18	3	4	3	3	6	5	24	17	32	15	56	23						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
OMAHA, NEBRASKA 31

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	1600	0	0	130	0	170	0	930	390	40	80	71	3	69	1																
10	23	61	8200	0	40	290	0	540	20	6770	520	540	120	71	6	68	2	69	2	51	1	57	1										
11	6	61	7200	0	0	290	0	310	0	6130	440	600	40	71	2	38	1																
11	20	61	2300	0	0	20	0	80	0	1970	270	150	20	71	7																		
12	4	61	2400	0	0	40	0	60	20	1970	290	20	40	71	4	68	2																
12	18	61	3300	60	0	310	0	640	0	2030	250	620	0	71	4	51	2	57	1	69	1	68	1	35	1								
1	2	62	200	0	0	0	0	60	0	80	20	80	0																				
1	15	62	500	0	0	0	0	40	0	330	100	40	20	71	2																		
2	5	62	2700	0	20	20	0	190	0	2260	210	150	0	71	4	68	1																
2	19	62	3300	170	0	60	0	370	0	2380	330	250	150	71	3	68	3	51	2	92	1	3	1										
3	5	62	500	0	0	0	0	0	60	170	230	40	0	88	1																		
3	19	62	500	0	0	0	0	0	20	100	370	60	120																				
4	3	62	1100	0	0	20	0	40	0	560	480	230	120	69	2	68	1	88	1														
4	16	62	700	0	0	0	0	60	0	440	170	320	150	68	1																		
5	7	62	15800	40	300	2890	110	110	270	9830	2220	4490	320	71	6	24	4	88	3	68	2	38	2	91	2	92	2	17	1	65	1	44	1
5	21	62	1200	0	0	60	0	0	0	630	460	170	380	71	2	77	1																
6	4	62	2200	0	80	40	0	60	0	290	1760	20	20	77	3	88	1	92	1	71	1												
6	19	62	1000	0	20	40	0	290	0	290	330	20	0	57	1																		
7	2	62	900	0	0	60	0	40	0	270	500	20	20	71	1	92	1																
7	16	62	1000	0	160	90	0	0	0	590	200	430	410	69	2																		
8	6	62	4700	120	20	520	120	500	0	2650	750	2900	120	71	3	68	3	51	2	69	2	38	1	88	1								
8	20	62	6500	170	0	350	80	560	0	4680	620	660	40	71	5	69	3	51	2	68	2	38	1	88	1	3	1						
9	4	62	10600	0	0	460	0	250	170	5280	4390	1770	840	71	5	68	4	88	4	86	2	97	2	81	2	91	2	87	2	38	2	51	1
9	17	62	3000	40	0	170	0	230	0	1950	620	500	40	71	4	68	2	51	1	38	1												

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
OMAHA, NEBRASKA 031

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																		NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			ROTIFERS											CRUSTACEA								
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	80	23	83	20	26	8	75	5	44	0	0	0											0							0	0
10	23	61	80	51	82	23	26	6	71	4	16	0	0	0											0							0	0
11	6	61	82	64	80	15	26	7	71	2	12	0	0	0											0							0	0
11	20	61										0	0	6											6							0	1
12	4	61	71	18	82	12	86	6	80	6	58	0	0	0											0							0	0
12	18	61	82	16	71	16	70	10	86	8	50	60	10	27	21	2	17	1							0							0	0
1	2	62										0	0	2											2							0	0
1	15	62										0	0	2											2							0	0
2	5	62										80	0	2											1							0	0
2	19	62										310	0	1											1							0	0
3	5	62	71	30	86	12	82	9	88	8	41	20	0	0											0							0	0
3	19	62	71	19	82	13	86	12	85	11	45	20	0	0											0							0	0
4	3	62	26	20	92	10	71	8	75	6	56	60	0	0											0							0	0
4	16	62	26	24	71	10	56	7	86	6	53	0	0	0											2							0	0
5	7	62	80	46	9	18	82	17	26	4	15	150	0	64	2	3	11	3	21	1					80	50	5	76	4	77	2	1	0
5	21	62	9	53	92	12	71	6	80	3	26	0	0	0											0							0	0
6	4	62	9	45	92	11	71	7	80	7	30	0	0	0											0							0	0
6	19	62	80	17	9	13	92	9	71	7	54	0	0	1											4							0	0
7	2	62	92	23	71	13	83	10	80	8	46	0	0	0											0							0	0
7	16	62	58	33	71	8	9	7	26	7	45	0	0	0											0							0	0
8	6	62	80	28	58	26	26	21	56	11	14	0	0	18	17	1	2	1							2							0	0
8	20	62	58	50	80	31	56	10	26	4	5	0	0	0											0							0	0
9	4	62	58	37	26	7	80	7	71	6	43	0	0	-											-							-	-
9	17	62	80	37	82	26	26	7	58	6	24	40	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
OMAHA, NEBRASKA 31

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	23	61	11	6	3802	222	49	173	2	11	14	1	1	12	0	6	3	1	12
11	20	61	12	4	3352	224	47	177	0	7	25	4	3	16	2	10	2	1	2
12	18	61	1	2	4666	144	35	109	1	13	10	1	1	8	0	4	3	1	3
1	15	62	1	29	4335	217	32	185	1	9	10	1	1	8	0	4	2	1	5
2	12	62	2	26	4118	242	74	168	4	14	25	1	1	23	0	12	4	2	13
3	12	62	3	26	4525	178	53	125	1	12	19	1	1	16	1	9	4	1	7
4	9	62	4	23	4328	175	72	103	1	18	22	1	1	18	2	8	6	2	15
5	7	62	5	21	3695	136	45	91	2	9	11	1	1	8	1	5	4	1	13
6	4	62	6	18	4091	110	37	73	0	10	10	1	1	8	0	4	3	0	10
7	2	62	7	16	4692	114	47	67	0	16	12	1	1	10	0	5	4	1	9
7	30	62	8	13	4502	117	36	81	0	12	8	1	1	6	0	4	2	1	9
8	27	62	9	10	4009	160	28	132	0	9	12	1	1	10	0	3	1	1	2
9	24	62	10	8	4493	118	42	76	1	14	10	1	1	8	0	5	3	1	9

NATIONAL WATER QUALITY NETWORK

CHEMICAL. PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
OMAHA, NEBRASKA 31

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	12.0	9.6	8.3	.6	24	2.4	7.0	.0	12	162	240	4	190	199	-	500	19000
10	9	61	14.9	8.4	8.3	2.0	17	2.7	6.8	.0	12	164	244	2	160	199	-	492	22000
10	16	61	14.3	8.5	8.2	2.0	21	3.1	6.9	.0	13	185	264	6	170	183	-	496	51000
10	23	61	11.5	10.2	8.3	2.2	20	3.0	7.1	.0	13	200	280	5	100	192	-	465	36000
10	30	61	11.1	8.9	8.2	2.4	17	2.6	6.8	.0	13	198	276	2	100	189	-	553	37000
11	6	61	2.7	11.2	8.3	2.9	21	2.7	6.8	.0	14	198	283	6	100	220	-	563	11000
11	13	61	6.6	10.1	8.3	2.2	16	2.9	7.2	.2	14	200	282	10	85	199	-	513	24000
11	20	61	2.2	11.2	8.1	2.1	44	2.9	7.4	.1	13	202	282	6	100	184	-	509	17000
11	27	61	3.4	11.3	8.2	2.8	22	2.9	6.9	.1	14	204	281	8	80	179	-	515	16000
12	4	61	4.4	10.8	8.2	2.3	42	2.8	7.0	.1	14	199	280	7	60	208	-	555	22000
12	11	61	.4	12.8	8.2	1.5	18	2.8	6.7	.1	14	199	280	6	80	189	-	503	3100
12	18	61	.1	12.6	8.1	1.5	20	2.7	6.4	.1	13	184	264	4	15	187	-	516	1400
12	25	61	.1	12.1	8.1	.3	38	2.6	6.9	.1	12	180	254	5	10	184	-	492	2600
1	2	62	.1	10.8	8.0	.5	20	2.8	6.6	.2	14	190	270	5	10	184	-	522	500
1	8	62	.1	10.9	10.9	1.2	16	2.8	5.1	.2	14	190	272	5	10	199	-	523	850
1	15	62	.1	10.9	8.1	.7	12	2.9	5.0	.1	13	190	278	5	15	220	-	552	2200
1	22	62	.1	11.1	8.0	1.6	15	2.8	4.8	.1	13	197	286	5	15	222	-	542	-
1	29	62	.1	10.8	8.0	1.7	13	3.0	4.8	.2	14	186	264	5	15	187	-	490	4700
2	5	62	.1	11.0	8.0	1.8	18	2.9	6.8	.2	13	187	278	5	15	192	-	513	1900
2	12	62	1.3	11.4	8.1	2.6	19	3.2	7.1	.2	14	182	260	9	50	187	-	506	5500
2	19	62	.4	9.4	7.9	6.6	32	4.7	11.2	.5	14	162	242	24	220	179	-	433	17000
2	26	62	.3	10.6	7.9	2.2	27	4.8	8.1	.5	13	176	252	13	20	168	-	473	2300
3	5	62	.4	10.3	7.9	1.6	18	3.0	6.7	.2	13	185	256	7	10	173	-	481	4500
3	12	62	.1	11.1	8.0	1.3	16	3.1	6.3	.2	13	171	238	5	15	153	-	440	7000
3	19	62	.3	10.6	8.0	1.1	17	3.0	6.9	.2	13	176	246	5	20	161	-	467	3600
3	26	62	1.2	7.2	7.8	6.4	198	7.6	15.0	.7	8	115	150	25	3200	80	-	264	22000
4	2	62	1.7	8.2	7.9	6.2	120	8.4	17.0	1.6	11	90	114	25	1625	46	-	174	-
4	9	62	5.1	9.2	7.9	4.7	58	10.9	16.9	1.5	7	106	144	30	660	55	-	220	3200
4	16	62	7.0	9.5	7.9	4.5	51	7.3	15.2	.4	9	134	208	20	420	79	-	301	9100
4	23	62	12.9	8.4	8.0	3.7	47	2.9	8.9	.3	9	144	214	18	300	96	-	326	5800
4	30	62	13.3	8.6	8.0	2.1	24	2.8	7.1	.1	9	150	234	16	190	121	-	414	5000
5	7	62	17.2	8.5	8.3	2.0	19	2.8	4.3	.0	12	172	266	12	150	168	-	466	3200
5	14	62	19.0	7.4	8.2	1.6	30	2.5	7.0	.1	14	178	266	8	300	183	-	485	9000
5	21	62	20.4	5.3	7.9	4.3	140	2.9	4.5	.1	12	160	236	12	3000	155	-	437	83000
5	28	62	17.9	7.3	8.0	2.6	73	2.7	7.0	.0	10	158	242	12	1050	150	-	413	25000
6	4	62	16.1	7.3	8.0	3.0	76	3.1	9.0	.0	10	177	250	12	1000	128	-	407	23000
6	11	62	20.8	5.8	7.7	5.3	106	2.8	6.5	.1	9	176	220	15	4600	127	-	353	-
6	18	62	22.8	5.2	7.9	-	178	2.2	6.5	.0	15	214	260	17	2700	136	-	450	100000
6	25	62	24.0	5.8	8.0	1.7	39	4.6	10.9	.0	10	168	258	14	360	142	-	431	4000

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
OMAHA, NEBRASKA 31

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	2	62	24.8	6.0	8.0	2.2	38	4.5	11.4	.0	10	167	260	13	410	162	-	420	2600
7	9	62	25.9	5.6	8.0	3.5	67	4.5	9.0	.0	13	179	248	16	1050	158	-	431	2700
7	16	62	23.8	6.2	7.9	3.5	160	5.1	12.1	.0	10	168	229	18	700	128	-	369	30000
7	23	62	25.5	5.5	8.0	2.7	75	4.9	9.0	.0	10	173	250	24	1200	146	-	415	20000
7	30	62	22.2	6.6	8.0	2.7	40	3.3	9.3	.0	12	177	270	14	460	165	-	426	18000
8	6	62	25.5	6.2	8.1	2.3	31	3.3	9.3	.0	13	192	286	16	240	179	-	462	26000
8	13	62	24.3	6.6	8.0	1.4	37	3.4	8.9	.0	14	174	278	11	340	193	-	486	11000
8	20	62	23.9	6.6	8.2	2.6	28	3.0	7.2	.0	12	165	264	12	210	192	-	471	3000
8	27	62	22.8	7.3	8.2	1.4	33	2.7	8.6	.0	11	160	268	11	150	213	.1	506	3100
9	3	62	22.8	6.5	8.0	2.6	100	3.0	9.0	.1	11	153	240	14	1000	171	-	429	13000
9	10	62	17.7	7.6	8.2	1.6	24	2.7	6.8	.1	11	172	270	11	220	200	.1	449	67000
9	17	62	20.6	7.1	8.2	1.3	25	2.5	7.2	.0	12	172	270	8	210	200	-	506	34000
9	24	62	17.5	8.2	8.3	2.1	20	2.8	-	.0	14	163	257	11	160	206	-	519	150000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Omaha, Nebraska
Operated by U.S. Geological Survey

STATE Nebraska
MAJOR BASIN Missouri River
MINOR BASIN Lower Missouri below Niobrara River
STATION LOCATION Missouri River at
Omaha, Nebraska

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	30.200	8.640	8.160	8.400	10.300	9.000	78.500	24.600	26.800	40.400	28.700	46.400
2	29.700	8.400	8.040	8.400	10.000	8.800	84.500	24.600	28.200	40.400	26.600	33.200
3	28.700	8.520	8.040	8.600	9.200	8.800	87.500	25.000	30.700	38.800	26.600	32.100
4	28.200	8.880	8.040	9.000	9.200	8.600	83.000	25.700	31.800	37.600	26.800	35.200
5	28.000	8.760	7.920	9.000	9.600	8.400	77.000	26.800	30.000	39.800	25.400	35.800
6	27.700	8.640	7.920	9.000	11.000	8.200	70.200	26.800	30.200	44.000	25.400	33.700
7	28.000	8.280	7.920	8.800	11.500	8.400	65.800	26.400	31.800	45.400	25.400	31.000
8	28.200	8.400	8.520	8.400	10.500	8.600	65.300	26.800	34.300	44.700	25.000	30.200
9	27.200	8.400	8.880	8.000	9.900	8.800	64.800	26.800	46.100	44.000	25.000	30.700
10	27.000	8.400	8.200	8.500	10.400	9.600	59.900	26.600	44.700	41.400	26.600	30.700
11	25.400	8.400	5.700	10.000	11.000	10.600	56.200	26.600	45.400	39.400	25.900	30.400
12	21.300	8.280	3.400	9.000	10.800	10.700	53.000	26.600	40.400	34.300	23.600	28.400
13	16.900	8.280	2.600	8.800	10.400	11.000	47.500	26.400	35.800	35.200	23.200	28.000
14	14.800	8.280	2.440	8.800	10.400	11.200	42.700	25.900	32.600	43.400	23.900	29.200
15	12.400	8.280	3.160	9.600	10.700	11.200	38.800	25.900	32.600	40.800	24.100	30.000
16	11.000	8.640	7.030	9.600	11.400	11.000	34.900	26.400	32.400	36.700	24.600	30.200
17	10.200	8.520	10.900	9.600	12.500	10.600	32.600	26.800	32.100	38.800	26.800	30.700
18	9.780	8.280	12.300	9.600	14.000	10.600	30.400	27.700	37.300	41.100	28.000	30.000
19	9.520	8.040	12.300	9.400	13.800	11.200	30.400	31.500	40.800	45.800	27.700	29.400
20	9.390	7.920	11.500	9.200	13.000	13.500	30.400	31.500	40.100	51.800	28.200	28.700
21	9.260	7.920	11.500	9.000	11.000	16.200	29.400	31.800	42.700	54.200	29.000	28.000
22	9.130	7.920	10.000	8.600	10.000	25.000	30.400	32.900	47.500	50.000	30.200	28.000
23	9.000	8.160	9.800	8.500	9.800	28.000	29.700	37.300	47.500	42.000	30.700	27.700
24	9.000	8.400	9.700	8.800	9.500	32.000	28.000	34.000	45.800	38.800	31.000	27.700
25	9.130	8.400	9.600	9.400	9.400	32.900	27.500	29.400	42.700	36.100	29.200	27.700
26	9.000	8.280	9.200	9.700	9.400	41.400	26.800	31.200	41.100	31.500	28.000	27.500
27	9.130	8.280	9.100	9.800	9.200	51.800	26.800	27.000	40.400	29.400	27.700	27.000
28	9.000	8.040	9.000	9.900	9.200	76.100	27.000	30.200	39.800	33.700	28.700	27.200
29	9.390	8.040	8.900	10.000		104.000	26.800	41.400	40.400	34.000	30.200	27.700
30	9.520	8.040	8.800	10.200		101.000	25.200	32.600	43.000	32.400	34.300	28.000
31	9.520		8.600	10.400		88.000		26.400		30.000	53.400	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE SOUTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
YANKTON, SOUTH DAKOTA 32

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	14	-	-	-	-	-	-	11	10	30	16	41	19						
10	9	61	10	27	-	-	-	-	-	-	11	11	48	16	59	19						
10	16	61	10	30	-	-	-	-	-	-	5	8	12	11	17	14						
10	23	61	11	3	1	1	3	3	4	3	4	8	28	12	32	14						
10	30	61	11	7	-	-	-	-	-	-	16	11	33	15	49	19						
12	18	61	1	11	-	-	-	-	-	-	6	11	22	15	28	19						
12	26	61	1	9	1	1	4	3	5	3	3	8	16	11	19	14						
1	2	62	1	17	-	-	-	-	-	-	1	12	30	16	31	20						
1	8	62	1	18	-	-	-	-	-	-	26	11	30	15	56	19						
1	15	62	1	29	-	-	-	-	-	-	9	11	24	10	33	15						
1	22	62	2	6	1	1	4	3	5	3	6	9	19	11	25	14						
1	29	62	2	12	-	-	-	-	-	-	6	11	31	15	37	19						
2	5	62	2	15	-	-	-	-	-	-	5	8	24	11	29	14						
2	12	62	2	27	-	-	-	-	-	-	16	12	41	16	57	20						
2	19	62	3	5	-	-	-	-	-	-	6	11	13	14	19	18						
2	26	62	3	14	4	5	3	3	7	6	60	14	23	11	83	18						
3	5	62	3	16	-	-	-	-	-	-	40	14	25	14	65	20						
3	12	62	3	26	-	-	-	-	-	-	8	12	21	14	29	18						
3	19	62	4	3	-	-	-	-	-	-	35	12	18	11	53	16						
3	26	62	4	9	0	1	7	7	7	7	8	8	58	14	66	23						
4	2	62	6	15	-	-	-	-	-	-	32	7	34	9	66	11						
4	9	62	4	27	-	-	-	-	-	-	64	7	82	9	146	11						
4	16	62	5	1	-	-	-	-	-	-	24	6	56	9	80	11						
4	23	62	5	29	0	0	4	3	4	3	5	6	54	12	59	13						
4	30	62	6	1	-	-	-	-	-	-	8	13	48	17	56	21						
5	7	62	6	20	-	-	-	-	-	-	8	13	44	19	52	23						
5	14	62	6	22	-	-	-	-	-	-	5	6	35	9	40	11						
5	21	62	6	26	-	-	-	-	-	-	9	11	34	15	43	19						
5	28	62	8	13	0	1	3	3	3	3	11	11	23	15	34	18						
6	4	62	7	6	-	-	-	-	-	-	10	9	43	12	53	15						
6	11	62	7	10	-	-	-	-	-	-	17	11	30	15	47	19						
6	18	62	7	17	-	-	-	-	-	-	0	10	34	14	34	17						
6	25	62	7	24	0	1	0	2	0	2	12	11	51	15	63	19						
7	2	62	7	31	-	-	-	-	-	-	7	13	22	18	29	22						
7	9	62	8	17	-	-	-	-	-	-	2	11	32	15	34	19						
8	6	62	8	28	-	-	-	-	-	-	14	11	52	15	66	19						
8	13	62	8	31	-	-	-	-	-	-	1	11	35	15	36	19						
8	20	62	9	5	0	1	4	4	4	4	117	18	54	17	171	25						
8	27	62	9	11	0	1	2	3	2	3	6	10	38	14	44	17						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE SOUTH DAKOTA

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT
YANKTON, SOUTH DAKOTA 32

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA							DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL					ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±		MO.	DAY	µµc/g	±	µµc/g	±
9	4	62	10	1	-	-	-	-	-	-	11	12	50	20	61	23							
9	10	62	10	8	-	-	-	-	-	-	13	12	12	18	25	22							
9	17	62	10	25	-	-	-	-	-	-	4	12	45	19	49	22							
9	28	62	10	22	0	1	2	3	2	3	0	16	38	8	38	18							

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE SOUTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
YANKTON, SOUTH DAKOTA 32

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	3600	20	20	270	0	1520	20	890	800	1010	300	55	4	71	3	88	2	38	1												
10	23	61	200	0	0	0	0	40	0	100	40	20	0																				
11	6	61	8400	0	0	180	0	6530	0	1140	600	3160	760	57	5	55	5																
11	20	61	1100	20	20	80	0	430	0	370	150	410	80	71	2	55	1																
12	4	61	1600	0	20	0	0	1180	70	180	160	1070	180	57	4	55	2	71	1														
12	18	61	3500	0	0	70	0	1510	160	1640	160	680	0	71	4	57	4	51	1	60	1												
1	2	62	800	0	0	20	0	150	20	440	170	250	20	71	2																		
1	15	62	2700	50	0	230	0	520	20	1600	320	520	70	71	4	57	1	51	1														
2	5	62	2700	0	0	70	0	40	0	1740	870	130	130	71	4	82	1	81	1														
2	19	62	12100	0	0	80	0	250	0	10910	830	150	0	71	7	82	1																
3	5	62	1100	0	0	0	0	90	0	220	760	130	200	82	2																		
3	19	62	1000	0	0	20	0	160	20	290	500	270	70	71	1	82	1	57	1														
4	2	62	1800	0	0	20	0	540	80	150	990	0	20	82	2	51	2	57	1	88	1												
4	16	62	400	0	20	20	0	70	0	0	250	0	20																				
5	7	62	7000	0	110	280	0	170	320	3040	3100	1440	210	71	5	82	3	81	2	77	2	88	2	62	2	85	2	87	1	92	1		
5	21	62	7700	0	0	590	40	190	20	3880	3000	2280	1220	71	5	77	3	88	2	82	2	44	2	87	1	81	1						
6	4	62	14200	0	20	150	20	520	60	4120	9300	1370	500	77	6	71	5	88	2	57	2	87	1	92	1								
6	18	62	43000	0	0	720	0	5360	300	22870	13800	9160	1560	71	7	51	6	77	6	92	5	87	5	68	3	74	3	80	3	69	2	82	2
7	2	62	8800	1280	0	80	0	20	40	2730	4680	460	330	71	4	88	4	4	4	86	2	87	2	80	2	69	1	81	1	92	1		
7	16	62	800	0	0	270	0	80	0	250	210	40	0																				
8	6	62	2300	60	0	20	0	290	60	1490	330	580	0	71	3	68	2	57	1														
8	20	62	2300	20	0	190	0	870	0	930	290	120	0	57	2	71	2	51	1	69	1												
9	4	62	9700	0	120	290	0	1740	210	4470	2860	4220	1570	71	5	69	4	51	3	87	3	88	2	57	2	38	1	82	1	52	1	92	1
9	17	62	1600	0	0	170	0	130	0	1130	170	1780	700	71	3																		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE SOUTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
YANKTON, SOUTH DAKOTA 032

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																					
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	83	42	80	31	68	5	71	4	18	20	0	0											0							0	0
10	23	61	80	60	84	13	71	3	26	3	21	0	0	24	17	2	21	1							2							0	0
11	6	61										0	0	0											0							0	0
11	20	61	80	42	82	11	26	9	84	7	31	0	0	22	2	1	17	1							5	50	1					0	0
12	4	61	80	43	84	12	83	5	36	5	35	50	0	0											0							0	0
12	18	61	82	21	80	20	84	18	36	4	37	200	0	317	22	6	21	4	17	3	2	3	15	2	22	77	3	50	1			5	0
1	2	62	80	36	84	8	26	4	83	4	48	0	10	73	21	3	46	2	15	2	17	1			15	77	2	50	1	76	1	0	0
1	15	62	80	15	71	9	62	8	45	8	60	20	10	47	15	3	21	2							9	50	1					1	2
2	5	62	45	26	33	16	27	14	46	9	35	0	10	10	15	1									8	50	1					0	0
2	19	62	36	16	80	14	35	13	82	11	46	40	50	16	21	1									13	50	3					0	0
3	5	62	36	31	35	13	45	9	71	6	41	90	20	0											5	77	1					0	0
3	19	62	36	26	71	18	35	15	51	8	33	50	0	2											3	50	1					0	0
4	2	62	36	32	71	9	35	8	65	4	47	40	0	7											2							0	0
4	16	62	36	33	45	13	35	9	71	8	37	0	0	2											3	50	1					0	0
5	7	62	80	43	82	11	9	8	33	7	31	0	20	109	17	4	2	3	21	2	11	2	46	1	78	50	4	76	3	77	2	2	0
5	21	62	9	39	80	35	83	4	36	4	18	300	0	6	17	1									13	76	2					-	-
6	4	62	9	42	80	27	71	7	92	5	19	60	0	0											9	76	1	77	1			0	0
6	18	62	9	40	30	20	80	19	58	6	15	40	0	2880	11	9	22	7	17	7	2	3	21	2	208	50	5	51	5	76	4	5	0
7	2	62	80	31	71	18	62	7	21	4	40	120	0	-											-							-	-
7	16	62	80	38	47	19	58	17	56	10	16	0	10	62	17	4	22	1							19	50	2	76	1			0	0
8	6	62	80	40	26	17	27	13	58	10	20	0	0	101	17	4	2	2	22	2	11	1			35	76	4	50	1			0	0
8	20	62	58	34	80	25	82	19	56	10	12	0	0	193	17	6	21	2	22	2					24	50	3	76	2			0	0
9	4	62	58	51	80	19	82	3	92	2	25	0	0	-											-							-	-
9	17	62	80	37	58	27	82	5	26	4	27	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE SOUTH DAKOTA

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT
YANKTON, SOUTH DAKOTA 32

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	23	61	11	4	4080	162	31	131	-	-	-	-	-	-	-	-	-	-	-
11	20	61	12	4	3930	156	32	124	-	-	-	-	-	-	-	-	-	-	-
12	18	61	12	31	4580	123	23	100	-	-	-	-	-	-	-	-	-	-	-
12	18	61		*	12590	136	26	110	2	8	7	1	1	5	0	3	1	0	5
1	29	62	2	12	5000	113	18	95	-	-	-	-	-	-	-	-	-	-	-
2	26	62	3	12	3340	141	32	109	-	-	-	-	-	-	-	-	-	-	-
2	26	62		*	8340	125	24	101	2	7	7	1	0	6	0	2	1	1	4
3	26	62	4	7	4980	113	32	81	-	-	-	-	-	-	-	-	-	-	-
4	23	62	5	5	3250	174	71	103	-	-	-	-	-	-	-	-	-	-	-
5	21	62	5	29	1000	266	102	164	-	-	-	-	-	-	-	-	-	-	-
6	18	62	7	2	1670	240	104	136	-	-	-	-	-	-	-	-	-	-	-
6	18	62		*	10900	164	61	103	2	19	18	2	1	14	1	8	5	1	8
7	23	62	8	6	5000	95	29	66	-	-	-	-	-	-	-	-	-	-	-
8	20	62	8	30	4230	125	48	77	-	-	-	-	-	-	-	-	-	-	-
9	24	62	10	4	3800	75	21	54	-	-	-	-	-	-	-	-	-	-	-
9	24	62		*	13030	99	33	66	1	10	9	1	1	7	0	3	3	1	6

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE SOUTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
YANKTON, SOUTH DAKOTA 32

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	3.5	13.2	8.2	1.2	-	.8	2.0	.1	20	162	234	30	20	-	.1	-	-
10	9	61	13.2	9.0	8.3	1.2	20	.7	1.9	.1	20	160	252	30	20	-	.1	-	18
10	16	61	14.6	9.1	8.3	1.1	-	1.4	2.6	.1	19	170	244	20	30	-	.1	-	32
10	20	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120
10	23	61	12.2	9.7	8.3	1.1	-	.7	2.2	.1	21	170	254	30	30	-	.1	-	60
10	30	61	10.8	10.4	8.3	1.3	-	.8	2.0	.1	22	170	256	20	20	-	.1	-	8
11	6	61	5.1	12.0	8.4	1.2	32	.8	3.8	.1	18	168	238	20	40	-	.1	-	130
11	13	61	5.2	12.8	8.2	.6	-	.9	2.9	.2	21	164	232	20	20	-	.1	-	-
11	20	61	9.1	9.6	8.3	.7	-	1.1	2.8	.1	18	164	222	20	20	-	.1	-	-
11	27	61	3.4	14.4	8.3	.8	-	.8	2.9	.1	20	164	230	10	20	-	.1	-	220
12	4	61	2.8	15.0	8.3	3.6	22	.6	2.0	.1	22	160	230	20	15	-	.1	-	33
12	11	61	5.4	15.1	8.2	3.4	-	1.1	3.0	.1	16	174	228	40	20	-	.1	-	-
12	18	61	4.4	16.5	8.2	4.1	-	.9	2.9	.2	17	170	234	20	20	-	.1	-	7
12	26	61	3.8	16.6	8.2	4.2	-	.5	3.0	.2	20	176	256	20	20	-	.1	-	-
1	2	62	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-
1	8	62	2.9	12.5	8.2	2.6	-	1.3	2.5	.2	20	180	260	30	20	205	.1	478	-
1	15	62	2.8	12.1	8.1	.7	-	1.5	3.9	.2	20	190	232	20	20	205	.1	488	-
1	22	62	1.9	13.7	8.1	2.7	-	1.6	2.9	.2	20	170	264	20	20	200	.1	482	*4
1	29	62	3.2	13.2	8.1	2.9	-	1.3	3.9	.2	20	182	246	40	30	215	.1	488	-
2	5	62	2.5	14.2	8.1	.5	-	1.4	3.6	.2	22	186	260	30	20	200	.1	496	*4
2	12	62	2.9	15.7	8.2	3.2	12	.7	2.8	.2	19	172	250	30	40	200	.1	488	200
2	19	62	2.8	16.4	8.2	4.6	-	.8	3.1	.1	19	164	238	30	30	185	.1	441	-
2	26	62	2.9	16.6	8.2	3.8	-	.3	1.4	.2	19	172	226	20	140	200	.1	511	11
3	5	62	3.4	18.0	8.2	3.2	-	.6	2.1	.2	19	156	196	30	100	150	.1	-	83
3	12	62	3.0	17.8	8.0	2.2	12	.4	2.6	.2	24	158	226	10	60	-	.3	-	-
3	19	62	2.9	18.4	8.0	1.0	-	1.0	2.8	.2	18	180	236	10	200	190	.2	450	-
3	26	62	1.9	19.2	8.0	2.2	-	2.7	3.9	.2	22	172	232	30	20	160	.1	438	33
4	2	62	1.0	18.4	8.0	2.7	-	3.1	4.7	.2	21	148	200	60	40	175	.2	425	-
4	9	62	2.5	12.0	8.1	4.4	-	1.1	6.1	.4	16	116	158	50	100	110	.1	303	-
4	16	62	2.2	12.9	8.1	2.2	-	2.6	5.4	.4	20	108	170	50	70	-	.1	270	-
4	23	62	9.0	10.7	7.9	2.3	-	2.4	7.0	.4	11	116	162	30	60	110	.2	360	-
4	30	62	12.8	9.5	8.0	2.0	-	1.2	2.7	.2	17	140	226	20	15	-	.2	359	*40
5	7	62	14.4	10.1	8.3	3.8	11	1.0	4.1	.2	22	170	258	10	25	205	.2	493	*4
5	14	62	17.2	9.0	8.2	1.5	-	.9	2.4	.2	21	172	258	20	20	200	.1	492	200
5	21	62	18.9	8.7	8.4	1.2	-	.3	2.1	.1	24	172	252	5	25	205	.1	492	80
5	28	62	17.9	8.6	8.3	.8	-	1.8	3.9	.2	22	162	246	5	20	190	.1	473	*40
6	4	62	17.0	9.3	8.2	.5	-	.5	3.2	.2	22	162	246	10	30	185	.1	452	200
6	11	62	19.8	10.4	8.4	5.3	-	.9	3.8	.2	21	160	244	10	30	175	.1	414	680
6	18	62	21.8	9.8	8.3	4.6	-	1.6	3.9	.1	22	158	238	15	60	160	.1	421	800

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE SOUTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION MISSOURI RIVER AT
YANKTON, SOUTH DAKOTA 32

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	25	62	23.0	7.3	8.1	4.2	-	2.8	5.1	.2	19	150	234	30	40	150	.1	420	200
7	2	62	24.0	7.9	8.1	1.2	-	1.2	-	.2	22	158	252	20	30	180	.1	445	100
7	9	62	25.2	8.3	8.2	.9	-	1.8	4.5	.2	25	656	240	20	25	36	.1	431	*40
7	23	62	24.6	9.8	8.1	3.2	-	1.4	4.2	.2	20	154	234	20	40	-	.1	-	*200
7	30	62	22.9	10.5	8.2	2.8	-	1.8	4.4	.1	22	152	244	10	15	-	.1	-	100
8	6	62	24.0	11.0	8.2	1.9	9	1.4	3.8	.2	23	154	244	5	10	195	.1	480	-
8	13	62	24.0	11.5	8.2	2.1	-	1.3	2.9	.1	23	154	238	5	15	190	.1	482	-
8	20	62	24.1	11.1	8.1	1.9	-	1.5	3.0	.1	20	148	240	5	15	200	.1	500	-
8	27	62	25.9	11.9	8.2	1.7	-	1.7	2.8	.2	20	154	252	10	20	210	.1	494	1000
9	4	62	20.8	7.9	8.2	1.2	-	1.3	2.7	.1	20	154	248	5	20	220	.1	498	100
9	10	62	16.8	9.2	8.2	1.4	-	.9	2.0	.1	22	148	248	5	20	210	.1	530	1000
9	17	62	19.9	9.8	8.2	1.4	-	.6	2.7	.2	19	148	240	10	20	210	.1	-	500
9	24	62	18.8	9.7	8.2	2.6	-	.8	4.0	.2	19	142	240	5	20	-	.1	-	*100

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Yankton, South Dakota
Operated by U.S. Geological Survey

STATE South Dakota
MAJOR BASIN Missouri River
MINOR BASIN Lower Missouri below Niobrara River
STATION LOCATION Missouri River at
Yankton, South Dakota

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	28.900	6.510	6.190	7.000	7.350	7.840	5.000	20.100	12.700	27.800	18.700	22.300
2	28.800	5.950	6.270	6.800	7.660	6.390	6.300	20.100	12.600	30.700	17.000	24.700
3	28.700	6.030	6.230	6.430	7.310	5.270	6.510	20.700	12.700	35.000	17.700	25.500
4	28.800	5.950	6.910	5.990	6.710	6.310	6.710	19.800	13.200	35.100	17.900	23.600
5	28.400	6.030	6.830	8.500	7.620	6.000	6.950	20.500	13.800	33.300	19.300	21.600
6	26.700	6.110	6.830	10.700	8.920	6.500	7.310	21.300	14.400	29.300	20.100	23.600
7	24.800	6.110	6.870	6.700	8.610	8.300	8.740	21.600	16.300	26.800	19.300	25.800
8	22.100	6.150	6.790	7.550	8.480	6.950	8.700	22.000	21.000	24.400	18.800	24.600
9	20.200	6.030	6.590	10.900	7.230	9.020	8.790	21.600	15.900	19.300	19.800	25.000
10	15.700	6.030	6.800	10.100	7.270	9.500	8.480	22.300	13.000	15.200	19.200	22.500
11	11.900	6.030	13.100	10.000	7.350	9.280	8.700	22.800	12.200	15.300	19.500	23.700
12	8.790	6.030	12.400	10.500	7.550	9.240	8.560	22.300	12.600	15.600	19.800	25.200
13	7.550	5.950	12.600	10.000	7.350	9.500	7.660	22.800	12.000	17.700	20.800	25.800
14	6.550	5.950	11.600	9.500	7.190	10.700	6.870	22.700	12.000	22.700	23.500	25.900
15	6.470	5.790	10.500	9.800	7.660	11.300	6.950	23.200	9.600	26.300	25.000	25.000
16	6.430	6.030	10.200	8.960	7.840	11.400	7.530	24.000	11.000	32.300	24.100	24.200
17	6.230	5.950	10.000	7.800	8.340	11.300	10.800	22.600	12.800	34.900	24.400	23.400
18	6.190	5.990	10.000	9.000	8.020	11.400	11.100	21.400	16.200	34.900	25.700	24.300
19	6.710	5.950	10.000	10.100	7.760	10.800	10.600	19.800	27.200	33.000	27.600	25.100
20	7.350	6.270	9.600	9.700	8.160	10.600	12.800	21.600	25.000	26.100	29.500	25.300
21	7.400	6.150	8.560	9.300	8.200	10.200	13.000	18.900	25.200	25.800	29.700	25.500
22	6.950	6.030	7.800	9.180	7.980	10.600	14.300	16.500	25.100	25.500	29.800	25.700
23	7.030	6.110	8.000	9.000	7.480	11.800	15.200	13.800	25.000	21.100	28.500	25.600
24	7.030	6.110	8.000	9.500	6.710	12.800	18.300	12.800	25.000	16.100	28.300	25.500
25	6.910	6.150	7.400	9.100	6.710	13.800	16.900	13.000	25.000	15.600	28.100	23.900
26	6.950	5.950	7.300	8.650	7.190	15.200	16.700	13.000	26.000	17.200	27.800	27.000
27	6.950	6.270	7.300	8.800	8.380	15.500	16.600	13.600	27.200	18.500	27.400	26.700
28	6.390	6.230	6.200	8.970	8.920	11.400	16.300	11.400	27.200	18.800	28.600	26.500
29	6.110	6.190	6.200	8.160		9.800	17.200	9.900	27.300	18.700	23.900	27.200
30	6.030	6.270	7.100	7.260		6.110	19.000	11.800	27.500	17.300	21.500	26.800
31	5.750		7.000	7.760		5.200		13.000		17.200	20.000	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NORTH DAKOTA

MAJOR BASIN MISSOURI RIVER

MINOR BASIN MISSOURI-SOURIS RIVERS

STATION LOCATION MISSOURI RIVER AT

BISMARCK, NORTH DAKOTA 33

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	3	61	10	13	1	1	0	2	1	2	9	8	16	11	25	14						
10	10	61	10	26	-	-	-	-	-	-	4	10	20	14	24	17						
10	17	61	10	25	-	-	-	-	-	-	41	21	16	14	57	26						
10	24	61	11	1	-	-	-	-	-	-	5	13	3	12	8	18						
10	31	61	11	13	-	-	-	-	-	-	2	12	9	14	11	18						
11	7	61	11	21	1	1	1	2	2	2	10	9	15	11	25	14						
11	13	61	11	27	-	-	-	-	-	-	18	12	26	14	44	18						
11	23	61	12	1	-	-	-	-	-	-	25	12	33	13	58	18						
11	28	61	12	12	-	-	-	-	-	-	25	12	22	14	47	18						
12	5	61	12	16	-	-	-	-	-	-	1	11	23	14	24	18						
12	12	61	12	21	-	-	-	-	-	-	0	11	5	14	5	18						
12	19	61	12	29	-	-	-	-	-	-	0	11	12	15	12	19						
1	2	62	1	12	0	1	4	2	4	2	4	8	15	11	19	14						
1	9	62	1	24	-	-	-	-	-	-	8	8	13	11	21	14						
1	16	62	1	25	-	-	-	-	-	-	0	10	8	14	8	17						
1	23	62	2	6	-	-	-	-	-	-	0	10	12	14	12	17						
1	30	62	2	9	-	-	-	-	-	-	0	11	6	15	6	19						
2	6	62	2	19	0	1	4	3	4	3	2	7	20	11	22	13						
2	13	62	2	23	-	-	-	-	-	-	8	10	18	14	26	7						
2	19	62	3	6	-	-	-	-	-	-	6	11	16	14	22	18						
2	27	62	3	13	-	-	-	-	-	-	0	8	11	11	11	14						
3	6	62	3	20	0	1	4	3	4	3	5	11	14	15	19	19						
3	13	62	3	30	-	-	-	-	-	-	7	11	19	11	26	16						
3	21	62	4	3	-	-	-	-	-	-	45	12	13	14	58	18						
3	27	62	4	11	-	-	-	-	-	-	7	11	25	14	32	19						
4	3	62	4	20	1	1	4	3	5	3	12	9	21	11	33	14						
4	10	62	4	24	-	-	-	-	-	-	17	12	23	15	40	19						
4	17	62	4	30	-	-	-	-	-	-	13	14	32	15	45	21						
4	24	62	5	31	-	-	-	-	-	-	0	13	24	18	24	22						
5	1	62	6	4	-	-	-	-	-	-	14	14	22	18	36	22						
5	8	62	6	12	1	1	4	3	5	3	5	11	15	14	20	18						
5	15	62	6	25	-	-	-	-	-	-	11	15	22	19	33	24						
5	22	62	6	27	-	-	-	-	-	-	16	12	27	15	43	19						
6	5	62	7	5	0	1	4	3	4	3	27	13	16	15	43	20						
6	12	62	7	17	-	-	-	-	-	-	14	12	36	15	50	19						
6	19	62	7	12	-	-	-	-	-	-	59	18	25	15	84	23						
6	26	62	7	23	-	-	-	-	-	-	11	13	28	15	39	20						
7	2	62	8	3	1	1	2	2	3	2	11	13	15	17	26	21						
7	17	62	10	4	-	-	-	-	-	-	7	11	14	15	21	19						
7	24	62	8	21	-	-	-	-	-	-	4	11	47	15	51	19						
7	31	62	10	12	-	-	-	-	-	-	3	7	13	6	16	9						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NORTH DAKOTA

MAJOR BASIN MISSOURI RIVER

MINOR BASIN MISSOURI-SOURIS RIVERS

STATION LOCATION MISSOURI RIVER AT
BISMARCK, NORTH DAKOTA 33

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	7	62	8	23	0	1	1	2	1	2	5	11	16	14	21	18						
8	14	62	9	5	-	-	-	-	-	-	27	10	17	7	44	12						
8	21	62	9	6	-	-	-	-	-	-	3	10	24	14	27	17						
8	28	62	9	18	1	1	4	3	5	3	15	9	40	13	59	16						
9	4	62	9	20	1	1	4	3	5	3	11	10	22	14	33	17						
9	18	62	10	10	-	-	-	-	-	-	12	11	24	15	36	19						
9	25	62	10	19	-	-	-	-	-	-	7	8	55	11	62	14						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NORTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN MISSOURI-SOURIS RIVERS
STATION LOCATION MISSOURI RIVER AT
BISMARCK, NORTH DAKOTA 33

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	3	61	2000	20	0	270	0	20	130	1500	90	1740	160	71	7	69	2																
10	10	61	400	0	0	0	0	70	0	0	380	20	110	77	1																		
11	7	61	400	0	20	0	0	20	0	80	270	0	80	77	1																		
11	22	61	400	0	0	50	0	0	0	50	270	0	140	77	1																		
12	5	61	500	0	0	50	0	0	0	50	450	20	0	77	2																		
12	19	61	100	0	0	0	0	0	0	0	120	0	20																				
1	2	62	100	0	0	0	0	0	0	20	50	0	0																				
1	16	62	200	0	0	0	0	110	20	20	0	20	0																				
2	6	62	00	0	0	0	0	0	0	0	20	0	20																				
2	19	62	300	0	0	0	0	60	0	120	80	0	20																				
3	6	62	100	0	0	0	0	0	0	80	20	20	60																				
3	21	62	200	0	0	20	0	0	0	20	140	0	50																				
4	3	62	300	0	0	20	0	60	0	20	190	0	0																				
4	17	62	500	20	0	110	0	0	0	180	180	50	110																				
5	8	62	100	0	0	0	0	40	0	20	40	0	40																				
5	21	62	200	0	0	0	0	0	0	60	130	0	60																				
6	5	62	500	0	0	20	0	0	20	40	460	0	40																				
6	19	62	300	0	0	0	0	20	0	0	270	20	60																				
7	2	62	500	0	0	20	0	0	0	300	170	40	0	71	1																		
7	17	62	300	0	0	40	0	40	0	120	80	40	0																				
8	7	62	800	20	0	0	390	0	0	80	290	0	0	50	2																		
8	21	62	4400	0	0	40	*	0	0	460	1480	80	130	50	4	88	2	87	2	82	2	71	1	68	1								
9	4	62	1400	0	0	130	0	20	0	380	890	40	0	88	2	68	1	71	1	87	1	82	1										
9	18	62	600	0	0	40	0	0	0	80	460	40	80	87	1																		
*8	21	62					2380																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NORTH DAKOTA

MAJOR BASIN MISSOURI RIVER

MINOR BASIN MISSOURI-SOURIS RIVERS

STATION LOCATION MISSOURI RIVER AT
BISMARCK, NORTH DAKOTA 033

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	3	61	9	84	47	7	58	3	84	2	5	70	0	2											1							0	0
10	10	61	9	74	47	17	58	6	36	2	1	0	0	8	17	1									9	77	1					0	0
11	7	61	9	87	47	3	58	3		1	6	0	0	0											8	77	2					0	0
11	22	61	9	76	47	7	45	6	84	2	9	0	0	0											10	77	2					0	0
12	5	61	9	59	56	10	45	7	47	5	19	20	0	0											6	77	1					0	0
12	19	61	9	79	45	6	84	3	70	2	10	0	0	0											4							0	0
1	2	62	9	84	45	4	97	1	98	1	10	0	0	5											18	77	2	50	2	76	1	0	0
1	16	62	9	48	47	5	65	3	58	2	42	20	0	1											10	77	2	50	1			0	0
2	6	62	9	44	16	6	45	6	84	5	39	20	0	0											1							0	0
2	19	62										0	0	1											5	77	1					0	0
3	6	62	9	53	51	4	54	4	92	4	35	0	0	1											5	77	1					0	0
3	21	62	9	36	36	12	64	6	47	5	41	0	0	0											2							0	0
4	3	62	9	33	64	11	71	7	65	5	44	0	0	0											9	50	1	76	1			1	0
4	17	62	9	19	91	3	45	2	58	2	74	20	0	0											2							0	0
5	8	62	9	60	36	11	51	6	92	3	20	80	0	4											20	76	3	50	2			0	0
5	21	62	9	58	36	9	51	6	65	4	23	0	0	2											18	50	3	76	1			0	0
6	5	62	80	17	36	13	92	9	9	6	55	0	0	4											13	50	2	76	2			0	0
6	19	62	92	11	35	6	65	5	75	5	73	0	0	0											19	50	2	76	2			0	0
7	2	62	36	27	9	17	56	9	70	7	40	110	0	2											33	50	3	76	3			0	0
7	17	62	9	26	36	18	82	11	26	6	39	0	0	0											7	50	1	76	1			0	0
8	7	62	36	48	65	9	82	5	58	4	34	0	0	3											0							0	0
8	21	62	36	21	70	9	71	8	82	5	57	0	0	0											0							0	0
9	4	62	67	16	36	15	71	8	9	8	53	0	0	3											2							0	1
9	18	62	36	12	65	8	71	7	64	5	68	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE NORTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN MISSOURI-SOURIS RIVERS
STATION LOCATION MISSCURI RIVER AT
BISMARCK, NORTH DAKOTA 33

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORC-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	13	61	11	5	2168	224	58	166	2	17	13	2	1	10	0	6	5	2	13
11	22	61	12	15	2237	198	21	177	1	7	7	1	1	5	0	2	1	0	3
2	1	62	2	24	2237	233	53	180	6	15	13	2	2	8	1	5	4	1	9
3	21	62	4	14	2377	156	52	104	3	16	14	2	1	11	0	5	5	1	8
5	1	62	5	20	1860	215	78	137	2	20	24	5	1	18	0	8	8	1	15
6	19	62	7	2	1267	218	86	132	2	27	21	3	2	15	1	8	7	2	19
7	27	62	8	19	2243	242	92	150	4	27	25	2	1	22	0	9	7	2	19
9	9	62	10	2	2168	170	49	121	1	17	11	1	0	10	0	7	2	2	9

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NORTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN MISSOURI-SOURIS RIVERS
STATION LOCATION MISSOURI RIVER AT
BISMARCK, NORTH DAKOTA 33

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	-	-	8.2	-	-	-	-	.2	162	224	4	35	-	-	-	-	10
10	10	61	-	-	8.3	-	-	-	-	.3	-	162	224	4	25	-	-	-	60
10	19	61	10.5	9.9	8.0	-	20	-	-	.2	7	162	224	4	25	178	.0	474	150
10	25	61	8.3	10.4	8.2	.8	11	2.6	3.7	.3	9	158	220	3	35	170	.0	446	220
10	31	61	-	-	8.3	-	-	-	-	-	-	160	224	2	68	-	-	-	180
11	7	61	7.0	11.9	8.1	.9	14	1.0	2.6	.2	8	158	226	2	69	173	.0	440	100
11	13	61	-	-	8.3	-	-	-	-	.1	11	158	224	5	40	172	.1	421	170
11	22	61	3.2	12.0	8.2	.5	14	-	-	.2	9	158	222	3	35	172	.1	458	80
11	23	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80
11	28	61	-	-	8.2	-	-	-	-	-	9	158	226	12	70	165	.0	424	24
12	5	61	-	-	8.3	-	-	-	-	-	9	156	218	0	35	165	.0	444	52
12	12	61	.4	13.7	8.3	.8	13	1.1	2.1	.6	9	160	222	0	28	183	.0	456	20
12	18	61	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-
12	19	61	-	-	8.2	-	-	-	-	.3	11	158	222	0	20	105	.0	425	11
1	2	62	-	-	8.2	-	-	-	-	.2	11	152	215	3	20	163	.0	416	59
1	3	62	.8	-	8.2	.6	13	1.1	-	.2	8	152	216	3	20	178	.0	429	-
1	9	62	-	-	8.4	-	-	-	-	.2	-	154	216	15	20	145	.0	404	*1
1	16	62	.4	13.0	8.5	-	13	-	-	.2	9	150	210	10	20	155	.0	408	*1
1	23	62	-	-	8.3	-	-	-	-	.4	-	150	224	5	20	170	.0	417	*1
1	31	62	.3	12.7	8.3	.5	12	-	-	.1	8	152	220	10	20	165	.0	429	5
2	6	62	-	-	8.3	-	-	-	-	.3	-	154	220	5	20	-	-	-	48
2	13	62	.4	12.5	8.3	-	14	1.5	-	.3	6	156	226	5	27	170	.0	423	64
2	20	62	-	-	8.3	-	-	-	-	.5	-	154	224	5	20	-	-	-	63
2	27	62	-	-	8.3	-	9	-	-	.2	-	156	228	5	20	-	-	-	10
3	6	62	.4	12.7	8.3	.7	15	1.5	3.0	.3	8	154	234	5	20	185	.0	449	0
3	13	62	-	-	8.2	-	-	-	-	.4	-	158	232	5	15	-	-	-	15
3	21	62	.8	12.4	8.2	-	14	1.7	-	.2	8	158	230	5	20	175	.0	449	36
3	27	62	-	-	8.2	-	-	-	-	.3	-	156	226	15	30	-	-	-	76
4	4	62	2.2	12.6	8.2	-	14	1.7	3.3	.3	10	164	228	15	32	170	.0	471	36
4	10	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
4	11	62	-	-	8.3	-	-	-	-	.2	-	166	234	10	45	-	-	-	16
4	16	62	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-	-
4	17	62	-	-	8.3	-	-	-	-	.1	-	168	238	15	50	-	-	-	*1
4	24	62	-	-	8.2	-	-	-	-	.3	-	166	246	3	30	-	-	-	3
5	1	62	6.8	11.8	8.1	-	14	1.4	-	.2	9	172	252	5	30	175	.0	-	*4
5	8	62	-	-	8.3	-	-	-	-	.2	-	160	240	0	25	-	-	-	*1
5	15	62	8.7	11.0	8.2	-	14	.8	2.4	.3	8	164	238	0	65	170	.0	417	52
5	22	62	-	-	8.4	-	-	-	-	.3	-	162	242	2	35	-	-	-	30
5	24	62	-	-	-	-	27	-	-	-	-	-	-	-	-	-	-	-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NORTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN MISSOURI-SOURIS RIVERS
STATION LOCATION MISSOURI RIVER AT
BISMARCK, NORTH DAKOTA 33

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	5	62	-	-	8.4	-	-	-	-	.2	-	160	230	7	120	-	-	-	-
6	12	62	15.0	9.5	8.2	-	13	-	-	.2	9	160	236	8	55	190	.0	487	80
6	19	62	-	-	8.1	-	-	-	-	.2	-	162	238	50	200	-	-	-	80
6	26	62	17.3	8.6	8.1	.8	-	-	-	.2	9	166	208	-	240	193	.0	487	-
7	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30
7	3	62	-	-	8.1	-	15	-	-	.4	-	164	226	15	35	-	-	-	-
7	10	62	-	-	7.9	-	-	-	-	.3	-	160	220	15	200	-	-	-	-
7	17	62	-	-	8.1	-	-	-	-	.3	9	162	232	3	35	180	.0	465	180
7	24	62	-	-	8.0	-	-	-	-	.3	-	166	216	7	90	-	-	-	260
7	31	62	19.5	-	8.1	-	-	-	-	.2	8	166	224	7	45	175	.0	450	-
8	4	62	18.8	-	8.2	-	-	-	-	.2	-	158	220	15	35	-	-	-	10
8	7	62	20.0	-	8.2	-	-	-	-	.2	7	162	220	8	35	170	.0	-	60
8	14	62	20.0	-	8.1	-	-	-	-	.2	7	162	220	7	40	180	.0	-	50
8	21	62	20.0	-	8.2	-	-	-	-	.2	-	166	218	5	37	-	-	-	41
8	23	62	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
8	28	62	20.0	-	8.2	-	-	-	-	.2	-	160	222	5	40	-	-	-	140
9	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52
9	4	62	-	-	-	-	-	-	-	-	8	-	-	-	-	170	.1	450	-
9	11	62	15.5	-	8.2	-	-	-	-	.1	-	158	220	15	30	-	-	-	150
9	18	62	17.1	-	8.1	-	-	-	-	.2	-	162	220	5	31	-	-	-	-
9	25	62	-	-	8.1	-	-	-	-	.2	10	158	118	5	35	125	.0	431	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Bismarck, North Dakota
Operated by U.S. Geological Survey

STATE North Dakota
MAJOR BASIN Missouri River
MINOR BASIN Missouri-Souris Rivers
STATION LOCATION Missouri River at Bismarck, North Dakota

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	7.020	24.800	15.600	22.400	24.100	22.500	26.100	18.400	29.200	9.310	11.700	8.300
2	7.120	24.200	14.900	22.400	24.200	22.500	25.900	18.400	25.800	8.610	8.530	7.830
3	6.790	24.300	15.300	22.500	23.900	23.300	26.400	17.700	24.000	8.110	9.170	7.670
4	6.680	26.000	15.200	21.800	24.200	23.300	25.000	18.200	20.700	8.530	10.400	7.750
5	6.910	26.400	15.700	22.200	24.400	22.800	23.000	17.700	24.400	8.990	12.600	7.380
6	7.000	25.800	15.000	21.800	22.200	22.900	22.600	16.600	29.700	8.400	12.600	6.660
7	6.950	26.700	15.100	21.800	22.500	23.700	22.500	16.600	31.600	11.500	11.100	6.820
8	6.770	27.600	15.000	22.000	23.900	23.700	25.200	16.100	32.100	14.200	10.500	6.360
9	6.910	29.000	12.000	20.000	24.500	23.700	25.300	16.000	28.000	16.200	12.200	7.060
10	6.880	28.700	12.000	19.000	24.500	23.200	26.700	18.400	28.900	15.600	13.300	6.580
11	7.960	27.800	12.000	21.000	24.500	23.100	27.200	20.700	27.400	16.900	12.900	6.680
12	10.800	27.800	12.000	21.400	24.800	23.500	27.400	22.100	27.200	18.500	11.800	6.750
13	12.300	27.900	13.000	21.500	24.600	23.000	26.900	22.300	31.900	18.900	9.940	7.280
14	12.800	28.700	13.000	21.700	24.200	22.900	24.200	23.400	32.500	16.600	8.500	8.330
15	13.500	29.300	13.000	21.600	24.200	23.500	21.600	23.000	32.300	10.100	8.240	7.360
16	13.500	29.400	13.000	20.800	24.500	24.000	20.800	24.700	31.100	7.530	7.730	7.160
17	18.400	29.600	13.000	21.600	23.800	23.200	21.400	26.200	30.800	11.700	6.910	6.780
18	21.600	29.800	13.400	22.200	23.500	22.500	23.600	23.700	27.400	18.400	6.840	6.920
19	23.800	29.800	13.600	22.400	24.300	22.100	23.300	21.700	25.200	16.400	6.880	6.990
20	24.800	29.000	13.700	22.600	23.300	21.700	24.000	24.400	16.900	16.100	6.460	6.870
21	25.900	27.300	15.000	23.100	23.600	22.300	24.700	23.900	12.200	17.700	6.680	6.750
22	26.600	26.300	17.300	24.100	22.800	22.500	24.900	24.300	10.300	16.800	7.280	6.700
23	25.200	25.000	19.200	23.300	22.700	23.000	23.900	25.300	10.700	16.100	8.940	6.780
24	25.800	21.200	20.400	23.600	22.900	24.000	20.500	26.000	10.400	16.800	9.210	6.920
25	26.000	18.200	22.000	24.000	22.900	24.500	19.600	25.600	9.670	18.900	8.330	8.880
26	26.400	19.800	22.100	24.200	23.900	25.300	19.900	26.100	10.300	16.200	7.570	12.200
27	26.100	18.900	21.700	24.600	22.300	25.900	19.600	26.400	12.300	14.700	7.670	13.000
28	24.800	16.800	22.000	24.000	22.400	26.800	19.700	26.000	9.200	15.600	8.080	13.500
29	24.800	15.800	22.000	24.200		27.200	21.200	26.200	11.200	11.700	8.330	13.400
30	23.800	15.600	22.200	23.900		26.000	19.500	27.000	10.800	8.800	8.330	12.400
31	23.700		22.400	24.500		26.100		27.600		9.940	8.580	

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NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NORTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN MISSOURI-SOURIS RIVERS
STATION LOCATION MISSOURI RIVER AT
WILLISTON, NORTH DAKOTA 34

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	11	7	-	-	-	-	-	-	45	22	6	14	51	26						
10	9	61	10	30	-	-	-	-	-	-	14	15	7	14	21	21						
10	16	61	10	30	-	-	-	-	-	-	35	17	21	14	56	22						
10	23	61	11	3	15	9	3	2	18	9	56	17	6	10	62	20						
10	29	61	11	7	1	2	4	3	5	4	19	11	23	11	42	16						
11	6	61	11	21	-	-	-	-	-	-	44	14	57	15	101	21						
11	20	61	11	30	-	-	-	-	-	-	23	14	30	15	53	21						
11	27	61	12	7	1	1	5	3	6	3	12	5	24	7	36	9						
12	4	61	12	18	-	-	-	-	-	-	0	11	11	15	11	19						
12	11	61	12	26	-	-	-	-	-	-	5	11	22	14	27	18						
12	18	61	1	2	-	-	-	-	-	-	7	11	23	15	30	19						
12	26	61	1	4	-	-	-	-	-	-	1	8	20	12	21	14						
1	2	62	1	12	-	-	-	-	-	-	14	11	15	14	29	18						
1	8	62	1	19	-	-	-	-	-	-	5	11	8	14	13	18						
1	15	62	1	29	-	-	-	-	-	-	0	10	7	13	7	16						
1	22	62	1	31	1	1	2	2	3	2	4	8	14	11	18	14						
1	29	62	2	7	-	-	-	-	-	-	1	8	26	11	27	14						
2	5	62	2	15	-	-	-	-	-	-	21	10	20	11	41	15						
2	12	62	2	20	-	-	-	-	-	-	25	12	36	14	61	18						
2	19	62	3	6	-	-	-	-	-	-	17	19	20	15	37	24						
2	26	62	3	12	1	1	2	2	3	2	12	9	24	11	36	14						
3	5	62	3	19	-	-	-	-	-	-	0	11	7	14	7	18						
3	12	62	4	2	-	-	-	-	-	-	6	11	21	12	27	16						
3	19	62	4	3	-	-	-	-	-	-	21	9	13	11	34	14						
3	26	62	4	11	2	3	3	2	5	3	49	13	30	10	79	16						
4	2	62	4	16	-	-	-	-	-	-	93	18	35	13	128	22						
4	8	62	4	27	-	-	-	-	-	-	41	23	13	15	54	27						
4	16	62	4	30	-	-	-	-	-	-	34	16	25	16	59	23						
4	23	62	5	25	2	3	5	4	7	5	20	16	35	15	55	23						
4	30	62	6	4	-	-	-	-	-	-	148	59	22	17	170	61						
5	7	62	7	18	-	-	-	-	-	-	58	20	18	13	76	24						
5	14	62	7	27	-	-	-	-	-	-	100	20	31	12	131	23						
5	21	62	6	28	-	-	-	-	-	-	770	25	45	8	815	26						
5	28	62	7	3	120	63	3	4	123	63	238	34	29	17	267	38						
6	4	62	7	6	-	-	-	-	-	-	1444	120	34	13	1478	121						
6	11	62	7	9	-	-	-	-	-	-	256	100	30	14	286	101						
6	18	62	7	17	-	-	-	-	-	-	381	104	80	8	461	104						
6	25	62	7	20	114	55	4	2	118	55	832	133	10	7	842	133						
7	2	62	8	6	-	-	-	-	-	-	99	50	3	6	102	50						
7	9	62	8	8	-	-	-	-	-	-	76	58	19	9	95	59						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NORTH DAKOTA

MAJOR BASIN MISSOURI RIVER

MINOR BASIN MISSOURI-SOURIS RIVERS

STATION LOCATION MISSOURI RIVER AT
WILLISTON, NORTH DAKOTA 34

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
7	16	62	8	9	-	-	-	-	-	-	336	114	33	13	369	114						
7	23	62	9	29	0	41	0	1	0	41	364	47	47	7	411	48						
7	30	62	8	23	-	-	-	-	-	-	94	23	28	13	122	26						
8	6	62	8	28	-	-	-	-	-	-	145	22	36	15	181	27						
8	13	62	8	27	-	-	-	-	-	-	4	35	32	7	36	36						
8	20	62	9	5	-	-	-	-	-	-	100	73	35	15	135	75						
8	28	62	9	26	-	-	-	-	-	-	43	41	23	17	66	44						
9	4	62	10	2	-	-	-	-	-	-	54	25	11	12	65	28						
9	10	62	10	9	-	-	-	-	-	-	37	23	22	15	59	27						
9	17	62	10	9	-	-	-	-	-	-	35	15	15	15	50	21						
9	24	62	10	17	0	1	4	3	4	3	6	16	24	18	30	24						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	NORTH DAKOTA
MAJOR BASIN	MISSOURI RIVER
MINOR BASIN	MISSOURI-SOURIS RIVERS
STATION LOCATION	MISSOURI RIVER AT WILLISTON, NORTH DAKOTA 34

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE		CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	400	0	20	40	0	0	0	50	250		70	960																				
10	16	61	1700	0	0	20	0	0	0	170	1510		40	170	92	2	82	1	77	1	87	1												
11	6	61	900	0	0	20	0	0	0	40	870		0	60	77	2																		
11	20	61	1200	0	0	20	0	20	0	0	1120		0	60	77	3																		
12	4	61	500	0	0	0	0	0	0	20	430		0	0	77	2																		
12	18	61	200	0	0	0	0	20	0	0	170		0	40	77	1																		
1	2	62	500	0	0	0	0	50	0	0	430		0	0	77	2																		
1	15	62	600	0	0	20	0	20	20	50	450		20	90	77	2																		
2	5	62	900	0	0	20	0	0	0	50	810		0	0	77	3																		
2	19	62	00	0	0	0	0	0	0	0	40		0	430																				
3	5	62	200	0	0	0	0	40	0	0	110		0	0																				
3	19	62	200	0	0	0	0	0	0	50	180		0	70																				
4	2	62	200	0	0	0	0	0	0	0	220		0	800	87	1																		
4	16	62	1700	0	0	70	0	140	0	230	1310		0	230	87	2	85	1	77	1	71	1	82	1										
5	7	62	500	0	0	0	0	0	0	210	340		130	890	71	1																		
5	21	62	2200	0	0	20	0	0	0	840	1350		340	2450	71	3	92	1	82	1														
6	4	62	-	-	-	-	-	-	-	-	-		-	-																				
6	18	62	3900	0	0	0	40	0	0	540	3270		120	120	87	3	92	2	82	2	88	2	71	1	81	1	68	1	86	1	85	1	79	1
7	2	62	1600	0	20	60	40	210	40	150	1060		0	120	82	1	92	1																
7	16	62	00	0	0	0	0	0	0	20	20		0	0																				
8	6	62	1900	0	0	120	0	460	0	330	950		0	120	82	2	92	1	57	1	71	1	51	1										
8	20	62	1000	0	0	0	40	60	0	250	660		0	0	87	1	82	1																
9	4	62	24100	100	0	1860	*	1260	170	2770	5920		410	1120	50	7	68	4	92	4	38	3	51	3	87	3	88	3	81	3	79	2	82	2
9	17	62	700	0	0	180	0	100	0	110	310		100	120																				
*9	4	62					11960																											

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NORTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN MISSOURI-SOURIS RIVERS
STATION LOCATION MISSOURI RIVER AT
WILLISTON, NORTH DAKOTA 034

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	[illegible]	T LEVEL		
10	2	61	92	18	36	17	41	11	15	6	48	0	0	0											0							0	0
10	16	61	92	24	9	16	36	14	75	6	40	0	0	0											0							0	0
11	6	61	92	52	36	15	83	7	9	6	20	0	0	0											0							0	0
11	20	61	92	39	9	18	36	17	71	3	23	0	0	0											0							0	0
12	4	61	9	87	86	3	92	3	56	1	6	0	0	0											1							0	0
12	18	61	9	94		1		1		1	3	0	0	0											0							0	0
1	2	62	9	72	92	7	64	3	71	3	15	20	0	0											0							0	0
1	15	62	9	86	36	4	92	3	80	1	6	140	0	2											0							0	0
2	5	62	92	20	36	14	9	13	46	9	44	70	0	0											1							0	0
2	19	62										0	0	0											0							0	0
3	5	62	36	22	9	18	92	17	68	5	38	0	0	0											0							0	0
3	19	62	9	24	36	23	65	8	92	6	39	0	0	0											2							0	0
4	2	62										20	0	0											0							0	0
4	16	62										0	0	0											1							0	0
5	7	62	36	16	92	13	65	12	80	10	49	0	0	0											4							0	0
5	21	62	92	16	36	15	65	6	86	5	58	0	0	1											0							0	0
6	4	62										-	-	-											-							-	-
6	18	62	92	16	36	14	65	9	64	5	56	0	0	0											0							0	0
7	2	62	36	25	92	22	65	7	41	5	41	0	0	0											0							0	0
7	16	62										0	0	-											-							-	-
8	6	62	36	29	92	25	47	9	97	5	32	0	0	-											-							-	-
8	20	62	36	21	92	7	65	7	80	5	60	0	0	-											-							-	-
9	4	62	26	35	92	12	58	5	16	4	44	0	0	0											0							0	0
9	17	62	26	29	92	8	27	6	70	6	51	0	0	3											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE NORTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN MISSOURI-SOURIS RIVERS
STATION LOCATION MISSOURI RIVER AT
WILLISTON, NORTH DAKOTA 34

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	8	61	11	17	5145	64	9	55	0	2	5	1	0	4	0	1	0	0	1
12	12	61	12	27	5363	100	30	70	2	11	6	0	0	6	0	2	2	1	6
1	19	62	2	6	5025	97	16	81	0	4	6	1	1	4	0	2	1	1	2
2	28	62	3	13	5400	111	39	72	0	12	11	1	1	7	2	4	1	1	10
4	3	62	4	17	5250	105	37	68	0	10	13	2	1	9	1	4	2	1	7
4	17	62	4	28	5550	93	36	57	1	10	10	1	1	8	0	4	3	1	7
5	2	62	5	9	5850	94	42	52	3	10	11	1	1	9	0	4	3	1	10
5	17	62	5	25	6090	79	32	47	1	10	8	1	0	6	1	3	2	1	7
5	28	62	6	5	6820	*	44	*	3	12	11	1	1	8	1	5	4	1	8
6	20	62	7	3	6270	88	45	43	1	12	11	1	1	8	1	5	4	1	11
7	3	62	7	18	5250	75	28	47	1	7	7	1	1	5	0	3	2	1	7
7	19	62	7	30	5422	58	22	36	0	6	7	2	0	5	0	3	1	0	5
8	9	62	8	21	5460	93	35	58	1	7	15	5	3	6	1	4	2	1	5
8	23	62	9	6	5137	83	27	56	0	4	18	7	5	5	1	2	1	1	1
9	7	62	9	27	5205	116	36	80	1	9	13	3	2	7	1	4	2	1	6
9	28	62	10	17	4860	110	20	90	1	3	11	3	2	6	0	2	1	0	2

* NOT REPORTED - OVERHEATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NORTH DAKOTA

MAJOR BASIN MISSOURI RIVER

MINOR BASIN MISSOURI-SOURIS RIVERS

STATION LOCATION MISSOURI RIVER AT
WILLISTON, NORTH DAKOTA 34

DATE OF SAMPLE MONTH	DAY	YEAR	TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND 1-HOUR mg/l	CHLORINE DEMAND 24-HOUR mg/l	AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
10	2	61	.9	-	8.4	-	-	-	-	-	-	148	228	-	625	-	.4	-	-
10	9	61	1.0	-	8.4	-	-	-	-	-	-	166	234	-	350	-	.4	-	-
10	16	61	1.1	-	8.3	-	-	-	-	-	-	150	230	-	310	-	.3	-	-
10	17	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	540
10	23	61	.6	-	8.3	-	-	-	-	-	-	170	230	-	1600	-	.5	-	2900
10	25	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2900
10	29	61	.4	-	8.2	-	-	-	-	.2	-	162	222	-	290	-	-	-	-
10	31	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2300
11	6	61	.6	10.9	8.1	-	-	-	-	.2	-	158	236	-	150	130	.3	-	-
11	14	61	.5	12.2	8.2	-	-	-	-	.7	-	156	240	-	290	-	-	-	1500
11	17	61	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-
11	20	61	2.0	13.0	8.3	-	-	-	-	-	-	164	240	-	260	-	-	-	-
11	27	61	3.0	10.5	8.1	-	-	-	-	.3	-	152	240	-	90	-	.4	-	900
12	3	61	.5	-	8.4	-	-	-	-	-	-	162	240	-	5	-	.3	-	-
12	5	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
12	11	61	.0	-	8.2	-	-	-	-	.1	-	168	246	-	0	167	.4	-	-
12	18	61	.0	-	8.2	-	-	-	-	.1	-	172	252	-	0	167	.2	-	500
12	26	61	.0	-	8.3	-	-	-	-	-	-	176	266	-	-	-	.2	-	-
12	27	61	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-	-
1	2	62	1.0	-	8.3	-	-	-	-	-	-	162	242	-	0	-	-	-	980
1	8	62	.0	8.5	8.2	-	-	-	-	-	-	156	228	-	0	-	-	-	-
1	10	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	180
1	15	62	.0	9.5	8.3	-	-	-	-	-	-	168	236	-	0	-	-	-	-
1	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140
1	22	62	.0	8.5	8.3	-	-	-	-	-	-	170	242	-	0	-	-	-	-
1	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600
1	29	62	.1	8.5	8.2	-	-	-	-	-	-	168	240	-	310	-	-	-	320
2	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	414	-
2	5	62	.0	9.2	8.3	-	-	-	-	-	-	156	230	-	70	-	-	-	110
2	12	62	.0	11.3	8.3	-	-	-	-	-	-	146	210	-	135	-	-	-	-
2	14	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62
2	19	62	.0	15.0	8.1	-	-	-	-	-	-	138	230	10	590	-	-	-	-
2	26	62	.0	10.5	8.1	-	-	-	-	-	-	146	224	-	64	175	.0	-	-
2	28	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
3	5	62	1.0	9.7	7.9	-	-	-	-	-	-	162	240	-	50	160	.2	-	-
3	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25
3	12	62	.0	10.-	8.1	-	-	-	-	.2	-	176	264	-	110	-	.0	487	-
3	13	62	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	41
3	19	62	.0	10.5	8.1	-	-	-	-	-	-	170	264	-	85	200	.0	479	17

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NORTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN MISSOURI-SOURIS RIVERS
STATION LOCATION MISSOURI RIVER AT
WILLISTON, NORTH DAKOTA 34

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
3	26	62	.2	13.5	8.1	-	-	-	-	.2	-	130	185	-	340	61	.0	370	-
3	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33
4	2	62	.3	14.5	8.2	-	-	-	-	.7	24	128	186	40	800	175	.0	-	-
4	9	62	3.0	15.0	8.3	-	-	-	-	.2	-	140	210	-	700	-	-	-	420
4	16	62	8.0	14.0	8.2	-	-	-	-	1.1	36	156	238	-	400	225	.4	503	-
4	17	62	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	*100
4	23	62	13.0	12.0	8.3	-	-	-	-	3.1	42	162	256	-	350	220	.0	520	-
4	28	62	-	-	-	-	31	-	-	-	-	-	-	-	-	-	-	-	-
4	30	62	13.0	14.2	8.1	-	-	-	-	2.5	-	132	194	-	1000	-	-	-	-
5	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1100
5	7	62	12.0	14.5	8.2	-	-	-	-	1.6	6	128	190	-	800	150	-	-	-
5	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700
5	14	62	13.0	12.5	8.3	-	-	-	-	1.5	26	116	170	-	340	-	-	-	200
5	21	62	16.0	12.5	8.2	-	-	-	-	1.1	36	102	150	-	560	-	-	-	250
5	28	62	14.0	15.0	8.1	-	-	-	-	1.2	-	114	240	-	2000	-	-	-	-
5	29	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4500
6	4	62	16.0	14.0	8.1	-	-	-	-	1.7	-	112	180	-	3000	-	.1	-	-
6	5	62	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	100
6	11	62	20.0	13.0	8.1	-	-	-	-	3.0	7	106	166	-	1000	165	.0	382	-
6	14	62	-	-	-	-	-	-	-	-	9	-	-	-	-	130	.0	346	-
6	18	62	20.0	-	8.0	-	-	-	-	-	-	100	140	-	2000	-	-	-	-
6	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
6	25	62	21.0	-	8.1	-	-	-	-	2.5	22	96	156	-	1500	27	.0	195	-
6	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2600
7	2	62	22.0	-	8.0	-	29	-	-	1.0	5	86	126	-	700	43	.0	-	-
7	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400
7	9	62	22.0	-	8.1	-	-	-	-	-	-	96	134	-	780	-	-	-	500
7	16	62	21.0	-	8.1	-	-	-	-	2.1	-	98	126	-	2000	-	-	-	-
7	18	62	-	-	-	-	25	-	-	-	-	-	-	-	-	-	-	-	-
7	23	62	21.0	-	8.1	-	-	-	-	-	8	104	154	-	2000	82	.0	405	-
7	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	900
7	30	62	21.0	-	8.1	-	-	-	-	3.0	6	108	176	-	600	150	.0	350	-
7	31	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*100
8	6	62	24.0	-	8.1	-	-	-	-	2.5	12	136	208	-	450	175	.0	477	-
8	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	800
8	20	62	22.0	-	8.8	-	-	-	-	-	10	152	224	-	800	190	-	498	-
8	21	62	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-
8	28	62	12.0	-	8.4	-	-	-	-	-	7	154	216	-	250	175	.0	465	-
8	29	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	130

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NORTH DAKOTA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN MISSOURI-SOURIS RIVERS
STATION LOCATION MISSOURI RIVER AT
WILLISTON, NORTH DAKOTA 34

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
9	4	62	16.0	-	8.1	-	-	-	-	-	11	188	248	-	280	192	.0	500	-
9	6	62	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-
9	10	62	14.0	-	8.2	-	-	-	-	-	11	164	236	-	140	190	.0	450	750
9	17	62	14.0	-	8.6	-	-	-	-	.9	12	162	260	-	140	195	.0	531	-
9	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30
9	24	62	16.0	-	8.5	-	-	-	-	1.7	7	152	224	-	130	170	.0	500	1500
9	27	62	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Williston, North Dakota
Operated by U.S. Geological Survey

STATE North Dakota
MAJOR BASIN Missouri River
MINOR BASIN Missouri-Souris Rivers
STATION LOCATION Missouri River at Williston, North Dakota

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	23.700	18.200	13.000	17.800	17.900	14.100	37.500	25.300	35.700	58.900	23.100	12.300
2	24.400	19.200	12.200	17.700	18.300	13.800	37.000	23.500	34.400	57.800	21.700	12.100
3	24.500	19.200	11.700	18.000	19.200	13.400	36.500	22.300	39.800	56.000	20.000	12.200
4	24.600	19.200	11.000	18.200	20.400	13.100	35.000	20.400	37.900	51.500	19.200	12.900
5	24.600	19.700	11.000	18.600	21.400	13.600	34.000	18.000	39.100	47.600	20.500	13.200
6	24.800	20.900	11.500	18.800	22.200	14.200	33.500	16.400	46.900	45.900	20.400	13.200
7	24.500	22.000	12.700	18.800	22.400	14.900	32.500	15.400	48.800	44.800	20.200	13.000
8	24.100	22.200	13.100	18.600	22.000	15.600	31.000	14.500	48.800	40.300	19.600	12.900
9	23.900	21.000	12.400	18.400	21.800	16.500	32.000	14.000	42.500	38.100	18.600	12.700
10	24.200	19.200	11.900	18.500	22.600	18.300	30.000	16.000	37.600	35.000	17.800	12.200
11	24.800	17.700	11.100	18.400	23.200	19.800	28.500	18.400	36.200	34.000	18.000	12.200
12	25.200	17.400	10.000	16.600	23.600	20.600	28.000	19.700	35.400	32.300	17.600	12.500
13	24.900	17.800	8.800	15.800	23.800	20.700	24.100	22.600	36.400	29.200	16.500	12.900
14	24.600	18.100	7.600	16.200	24.000	20.700	23.800	27.400	38.800	27.400	16.500	13.500
15	26.400	17.900	7.900	16.400	23.600	20.700	23.600	30.100	50.400	25.400	18.400	14.200
16	26.600	17.600	8.700	16.300	23.600	20.000	22.800	30.100	59.900	40.000	19.000	13.600
17	25.000	17.400	9.700	15.800	24.000	19.800	22.500	29.300	57.800	47.900	17.600	13.100
18	24.600	17.100	10.500	15.400	25.700	20.600	22.300	27.100	56.500	51.800	16.300	13.600
19	22.700	16.500	10.700	15.300	29.700	21.300	21.800	25.500	62.300	46.200	15.100	14.000
20	19.000	16.400	11.200	15.300	34.000	21.200	19.800	24.600	71.400	49.600	14.300	13.900
21	17.500	16.600	11.800	15.100	30.000	22.400	18.300	23.500	69.400	43.200	13.200	13.400
22	17.300	15.400	12.300	15.300	23.400	25.500	17.600	23.300	63.800	38.900	12.600	13.100
23	17.500	14.900	12.000	15.600	18.400	34.000	17.800	23.600	60.500	36.000	12.200	12.800
24	17.300	15.000	12.900	15.800	16.200	42.000	19.000	27.500	59.100	33.400	11.900	12.600
25	17.200	16.000	14.700	15.900	15.200	44.000	22.900	27.700	57.300	30.800	11.700	12.300
26	17.100	18.000	15.900	16.100	14.900	43.000	24.000	26.300	56.400	28.600	11.700	12.600
27	17.200	19.000	16.600	16.300	14.600	42.000	22.300	34.900	57.200	26.800	12.200	13.200
28	17.000	16.000	16.600	16.600	14.500	41.000	21.500	37.500	57.800	25.600	12.700	13.600
29	16.400	12.000	17.300	16.700		40.000	22.400	36.400	59.500	23.900	13.200	13.500
30	16.600	13.000	17.400	16.700		39.000	24.800	39.800	60.700	22.600	13.000	13.400
31	17.600		17.300	16.900		37.000		39.000		23.100	12.600	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE PENNSYLVANIA
MAJOR BASIN OHIO RIVER
MINOR BASIN MONONGAHELA RIVER
STATION LOCATION MONONGAHELA RIVER AT
PITTSBURGH, PENNSYLVANIA 83

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	24	61	10	31	5172	193	65	128	3	13	24	8	4	12	0	7	6	1	11
11	30	61	12	6	3924	259	106	153	3	22	47	20	8	18	1	11	5	2	16
1	11	62	1	12	710	*	-	-	-	-	-	-	-	-	-	-	-	-	-
5	10	62	5	22	2015	*	174	*	7	47	63	21	8	30	4	17	17	4	19
7	19	62	7	26	3027	232	124	108	1	19	71	23	10	29	9	22	5	1	5
8	10	62	8	24	1078	318	135	183	1	27	72	28	7	29	8	15	7	1	12

* LOW FLOW - NOT PROCESSED

* NOT REPORTED - OVERHEATED

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE PENNSYLVANIA

MAJOR BASIN OHIO RIVER

MINOR BASIN MONONGAHELA RIVER

STATION LOCATION MONONGAHELA RIVER AT
PITTSBURGH, PENNSYLVANIA 83

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	3	61	10	12	0	1	0	1	0	1	2	8	18	10	20	13						
10	10	61	10	25	0	1	1	2	1	2	5	9	2	10	7	13						
10	17	61	10	31	0	1	0	2	0	2	15	8	28	12	43	14						
10	25	61	11	3	0	1	1	2	1	2	3	8	16	10	19	13						
10	31	61	11	10	0	1	1	2	1	2	2	8	12	10	14	13						
11	8	61	11	21	0	1	0	1	0	1	2	8	27	10	29	13						
11	15	61	11	28	0	1	1	2	1	2	5	8	23	9	28	12						
11	21	61	12	1	0	0	0	1	0	1	0	5	21	7	21	9						
11	28	61	12	5	1	1	0	1	1	1	13	5	17	5	30	7						
12	5	61	12	14	0	0	0	1	0	1	4	5	17	7	21	9						
12	14	61	12	21	0	1	1	1	1	1	6	4	17	5	23	6						
12	19	61	1	3	4	2	0	1	4	2	27	7	11	5	38	9						
1	3	62	1	15	0	0	0	1	0	1	5	4	11	6	16	7						
1	22	62	2	1	0	1	0	1	0	1	6	4	33	6	39	7						
2	13	62	2	23	0	1	0	1	0	7	0	6	15	6	15	8						
2	19	62	3	6	0	1	0	1	0	1	0	5	16	7	16	9						
2	27	62	3	13	0	1	0	1	0	1	28	8	21	7	49	11						
3	6	62	3	27	3	2	0	1	3	2	33	7	11	6	44	9						
3	12	62	3	29	2	3	0	1	2	3	36	7	16	6	52	9						
3	20	62	4	2	0	1	0	1	0	1	7	4	15	5	22	6						
3	27	62	4	10	4	3	1	1	5	3	31	8	13	5	44	9						
4	3	62	4	13	0	0	0	1	0	1	3	4	15	6	18	7						
4	11	62	4	27	1	1	0	1	1	1	9	5	16	6	24	7						
4	17	62	5	1	0	1	1	1	1	1	0	13	8	7	8	15						
4	24	62	5	25	2	1	0	1	2	1	30	8	15	7	45	11						
5	1	62	6	25	0	0	0	1	0	1	0	4	19	7	19	8						
5	7	62	6	14	0	0	0	1	0	1	3	5	21	8	24	9						
5	15	62	6	22	0	0	0	2	0	2	6	7	15	10	21	12						
5	22	62	6	28	0	1	0	1	0	1	0	14	14	12	14	18						
5	29	62	7	2	0	1	0	2	0	2	4	11	41	15	45	19						
6	6	62	7	6	0	1	2	3	2	3	2	9	44	13	46	16						
6	25	62	8	14	0	1	0	2	0	2	7	11	34	15	41	19						
7	3	62	8	7	-	-	-	-	-	-	1	12	26	18	27	22						
7	10	62	8	13	-	-	-	-	-	-	2	3	13	5	15	6						
7	17	62	8	7	0	0	0	0	0	0	4	5	15	8	19	9						
7	24	62	8	9	0	1	0	1	0	1	2	11	31	14	33	18						
7	31	62	8	15	-	-	-	-	-	-	0	10	37	16	37	19						
8	7	62	8	29	-	-	-	-	-	-	0	9	12	13	12	16						
8	14	62	8	31	-	-	-	-	-	-	0	16	36	15	36	22						
8	21	62	9	30	-	-	-	-	-	-	23	11	13	14	36	18						
8	28	62	10	24	-	-	-	-	-	-	2	10	17	14	19	17						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE PENNSYLVANIA
MAJOR BASIN OHIO RIVER
MINOR BASIN MONONGAHELA RIVER
STATION LOCATION MONONGAHELA RIVER AT
PITTSBURGH, PENNSYLVANIA 83

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
9	5	62	10	2	-	-	-	-	-	-	4	11	21	15	25	19						
9	11	62	10	8	-	-	-	-	-	-	2	12	55	19	57	22						
9	19	62	10	10	0	1	0	1	0	1	5	5	22	8	27	9						
9	25	62	10	22	-	-	-	-	-	-	0	5	26	9	26	10						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE PENNSYLVANIA
MAJOR BASIN OHIO RIVER
MINOR BASIN MONONGAHELA RIVER
STATION LOCATION MONONGAHELA RIVER AT
PITTSBURGH, PENNSYLVANIA 83

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	3	61	700	0	0	540	0	0	0	100	80	0	60	28	2																		
10	17	61	3500	0	0	3110	0	370	0	0	40	0	0	28	5	51	2																
11	8	61	1000	0	0	0	0	440	580	0	20	0	60	63	2	51	2																
11	21	61	3100	0	0	20	0	2990	0	20	70	20	70	51	1																		
12	5	61	00	0	0	0	0	20	0	0	0	0	0																				
12	19	61	1000	0	0	0	0	0	0	20	990	0	190	92	1																		
1	3	62	00	0	0	0	0	0	0	0	0	0	50																				
1	15	62	00	0	0	0	0	20	0	0	0	0	0																				
2	5	62	200	0	0	0	20	20	0	20	90	0	50																				
2	19	62	100	0	0	0	0	20	0	20	40	0	0																				
3	5	62	600	0	0	20	0	0	0	0	540	0	100	87	1	92	1																
3	20	62	100	0	0	0	0	0	0	0	80	0	150																				
4	7	62	100	0	0	0	0	0	0	0	80	0	20																				
4	17	62	200	0	0	0	0	0	0	110	130	20	110																				
5	7	62	4100	0	0	3910	0	0	0	0	190	0	0																				
5	22	62	300	200	0	0	0	40	0	50	70	0	0																				
6	6	62	100	20	20	0	0	50	0	0	0	0	0																				
6	25	62	2200	0	0	680	40	390	0	190	930	20	20	28	2	44	2	57	1	88	1												
7	3	62	1200	0	20	850	0	210	0	0	100	0	0	28	3																		
7	17	62	2900	0	0	0	0	1650	40	170	1060	80	40	51	4																		
7	31	62	4500	0	0	3060	40	340	1060	0	20	0	40	28	5	63	3	51	2	62	1												
8	21	62	2800	20	20	2420	0	190	0	20	80	0	0	28	4	51	1																
9	5	62	100	0	0	70	0	0	0	0	10	20	20																				
9	19	62	3400	20	0	2900	0	410	0	20	0	0	20																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE PENNSYLVANIA

MAJOR BASIN OHIO RIVER

MINOR BASIN MONONGAHELA RIVER

STATION LOCATION MONONGAHELA RIVER AT

PITTSBURGH, PENNSYLVANIA 083

DATE OF SAMPLE Month	Day	Year	DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) 1st Species	1st Percent	2nd Species	2nd Percent	3rd Species	3rd Percent	4th Species	4th Percent	Other Species Percent	Fungi and Sheathed Bacteria Number per ml.	Protozoa (Identifiable) Number per ml.	MICROINVERTEBRATES ROTIFERS Number per Liter	Rotifers Genera and Count Level (See text for Codes) 1st Genus	1st Count Level	2nd Genus	2nd Count Level	3rd Genus	3rd Count Level	4th Genus	4th Count Level	5th Genus	5th Count Level	CRUSTACEA Number per Liter	Crustacea Genera and Count Level (See text for Codes) 1st Genus	1st Count Level	2nd Genus	2nd Count Level	3rd Genus	3rd Count Level	Nematodes (Identifiable) Number per liter	Other Animal Forms (Number per liter)
10	3	61	82	29	46	11	26	6	70	6	48	0	0	24	2	2	15	1							5	50	1					0	0
10	17	61										0	0	88	2	5									0							0	0
11	8	61										0	0	15	2	2									0							0	0
11	21	61										160	0	0											0							0	0
12	5	61										70	0	1											0							0	0
12	19	61	92	15	62	11	31	9	65	6	59	0	0	0											0							0	0
1	3	62										0	0	0											1							0	0
1	15	62										0	0	1											0							0	0
2	5	62										0	0	0											0							0	0
2	19	62	58	16	83	13	80	11	46	8	52	0	0	0											0							0	0
3	5	62	92	16	71	14	65	8	66	6	56	20	0	0											0							0	0
3	20	62	92	10	86	10	64	6	63	5	69	20	0	0											0							0	0
4	7	62	47	28	92	8	51	6	50	5	53	0	0	0											0							1	0
4	17	62	65	12	71	9	52	8	92	7	64	0	0	0											0							0	0
5	7	62										0	0	0											0							0	0
5	22	62										0	0	84	2	5									0							0	0
6	6	62										0	0	51	2	4									0							0	0
6	25	62	65	12	71	10	43	10	92	6	62	0	0	3											0							0	0
7	3	62										0	0	4											0							0	0
7	17	62										0	0	366	2	7									14	50	3					2	0
7	31	62										0	0	1210	2	8	15	2							8	50	2					0	0
8	21	62	43	14	71	12	64	5	26	5	64	0	0	8	15	1									54	50	5	76	2	51	1	0	0
9	5	62	71	13	43	11	64	11	92	5	60	0	0	0											0							0	0
9	19	62	43	27	70	11	2	8	74	8	46	0	0	72	15	3	2	3							25	76	3	50	2			0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN OHIO RIVER
MINOR BASIN MONONGAHELA RIVER
STATION LOCATION MONONGAHELA RIVER AT
PITTSBURGH, PENNSYLVANIA 83

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	21.0	-	4.8	-	-	-	-	-	10	2	128	-	25	233	-	392	-
10	10	61	21.6	-	4.2	-	-	-	-	-	9		118	-	25	222	-	380	-
10	17	61	20.0	-	4.3	-	-	-	-	-	11		130	-	25	233	-	410	-
10	24	61	20.0	-	4.1	-	-	-	-	-	12	2	128	-	25	244	-	-	-
10	31	61	19.8	-	4.2	-	-	-	-	-	12		128	-	25	222	-	207	-
11	8	61	9.5	-	4.5	-	-	-	-	-	9	1	118	-	25	206	-	-	-
11	14	61	16.7	-	4.5	-	-	-	-	-	10	2	90	-	25	150	-	262	-
11	21	61	12.5	-	6.8	-	-	-	-	-	14		90	-	25	149	-	259	-
11	28	61	12.5	-	6.9	-	-	-	-	-	10	9	82	-	25	94	-	163	-
12	5	61	10.0	-	6.3	-	-	-	-	-	10	7	68	-	25	108	-	196	-
12	12	61	8.0	-	6.2	-	-	-	-	-	5	3	70	-	25	109	-	107	-
12	19	61	10.5	-	6.5	-	-	-	-	-	3	7	43	-	210	72	-	-	-
1	2	62	8.0	-	6.4	-	-	-	-	-	5	4	74	-	25	112	-	-	-
1	9	62	8.0	-	6.2	-	-	-	-	-	-	3	62	-	170	-	-	-	-
1	15	62	7.5	-	6.7	-	-	-	-	-	8	6	56	-	25	79	-	98	-
1	23	62	7.0	-	6.6	-	-	-	-	-	-	4	78	-	25	87	-	147	-
2	5	62	9.2	-	6.4	-	-	-	-	-	6	5	80	-	50	101	-	170	-
2	13	62	6.8	-	6.7	-	-	-	-	-	6	3	74	-	0	-	-	124	-
2	19	62	10.5	-	6.4	-	-	-	-	-	7	2	88	-	25	114	-	219	-
2	28	62	14.4	-	6.5	-	-	-	-	-	9	7	64	-	150	84	-	178	-
3	5	62	12.0	-	6.1	-	-	-	-	-	6	5	66	-	80	94	-	163	-
3	13	62	10.2	-	6.2	-	-	-	-	-	5	5	88	-	190	128	-	221	-
3	20	62	10.0	-	6.2	-	-	-	-	-	4	4	62	-	56	94	-	174	-
3	27	62	11.0	-	6.5	-	-	-	-	-	3	4	52	-	110	65	-	116	-
4	3	62	11.2	-	6.9	-	-	-	-	-	4	12	70	-	35	66	-	164	-
4	9	62	13.2	-	6.3	-	-	-	-	-	3	7	104	-	120	90	-	189	-
4	17	62	13.8	-	6.2	-	-	-	-	-	6	5	80	-	110	124	-	173	-
4	24	62	14.4	-	5.6	-	-	-	-	-	8	3	96	0.	65	125	-	210	-
5	1	62	19.3	-	5.9	-	-	-	-	-	6	3	92	0	35	153	-	211	-
5	8	62	18.5	-	5.8	-	-	-	-	-	8	4	120	1	13	190	-	283	-
5	15	62	19.7	-	5.2	-	-	-	-	-	9	3	104	0	11	191	-	317	-
5	22	62	25.0	-	5.3	-	-	-	-	-	4	3	122	2	13	223	-	386	-
5	29	62	24.0	-	4.8	-	-	-	-	-	10		124	5	15	239	-	422	-
6	26	62	25.8	-	4.5	-	-	-	-	-	7	2	114	2	14	239	-	-	-
7	3	62	25.1	-	7.0	-	-	-	-	.5	9	16	142	4	25	219	-	-	-
7	10	62	25.1	-	6.8	-	-	-	-	.2	11	8	112	2	17	164	-	311	-
7	17	62	26.2	-	6.0	-	-	-	-	.5	10	3	112	2	11	189	-	286	-
7	24	62	25.2	-	5.4	-	-	-	-	.4	7	2	118	2	12	198	-	351	-
7	31	62	26.3	-	4.7	-	-	-	-	.4	11	1	114	1	15	225	-	371	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN OHIO RIVER
MINOR BASIN MONONGAHELA RIVER
STATION LOCATION MONONGAHELA RIVER AT
PITTSBURGH, PENNSYLVANIA 83

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	7	62	27.6	-	5.0	-	-	-	-	.3	10		122	5	8	240	-	318	-
8	14	62	24.8	-	4.8	-	-	-	-	.2	10		136	0	14	224	-	391	-
8	21	62	26.2	-	4.9	-	-	-	-	.3	9	2	123	2	11	197	-	396	-
8	27	62	27.0	-	5.1	-	-	-	-	.4	-	2	142	0	10	262	-	454	-
9	5	62	25.0	-	6.4	-	-	-	-	.6	13	11	138	2	30	220	-	367	-
9	11	62	24.0	-	5.9	-	-	-	-	.6	16	3	173	0	11	269	-	497	-
9	18	62	22.0	-	5.7	-	-	-	-	-	-	1	192	2	10	-	-	-	-
9	25	62	21.4	-	5.6	-	-	-	-	-	13	1	190	5	12	310	-	493	-

687-228 O-63—34

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Braddock, Pennsylvania
Operated by U.S. Geological Survey

STATE	Pennsylvania
MAJOR BASIN	Ohio River
MINOR BASIN	Monongahela River
STATION LOCATION	Monongahela River at Pittsburgh, Pennsylvania

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	2.180	4.400	10.500	8.100	15.600	64.500	28.200	7.800	4.240	1.980	1.940	1.800
2	2.240	6.550	8.100	7.050	13.500	44.000	21.600	10.200	4.240	1.740	1.940	5.490
3	2.860	7.300	6.800	7.550	12.400	37.400	18.000	8.700	3.200	2.960	1.800	3.400
4	3.640	6.800	5.400	6.550	12.800	35.200	15.600	7.550	2.680	3.800	1.800	2.960
5	4.550	5.200	6.000	7.550	16.600	28.600	12.800	5.900	4.520	3.560	1.940	3.700
6	5.000	4.950	6.100	9.900	22.400	23.200	12.400	4.920	11.400	3.140	2.330	3.280
7	4.400	6.800	5.250	35.800	20.000	20.000	23.800	4.480	11.100	3.060	2.220	2.780
8	3.080	7.050	4.650	54.300	18.000	19.200	52.100	4.920	7.550	2.680	2.380	2.300
9	2.680	7.050	3.900	31.300	16.300	18.800	40.700	5.520	5.760	2.330	2.820	2.080
10	2.940	6.550	3.600	27.700	14.900	16.000	29.500	5.440	3.450	2.220	2.890	2.020
11	2.810	5.650	4.970	25.000	10.200	16.300	25.000	5.480	2.610	2.160	2.500	2.440
12	2.680	5.500	10.400	20.800	8.400	36.200	25.000	5.000	4.450	2.120	2.300	2.330
13	2.680	4.500	15.600	16.000	10.500	49.700	50.200	4.280	11.400	1.980	2.220	1.940
14	3.400	5.100	17.400	11.400	11.400	38.500	52.100	3.880	12.400	2.190	2.680	1.770
15	4.750	6.300	18.800	8.100	10.800	36.300	40.700	4.640	11.100	2.300	2.640	1.700
16	4.950	7.050	17.400	12.800	10.200	31.300	35.200	4.680	9.600	2.640	2.440	1.630
17	4.950	9.000	18.000	12.100	10.500	28.600	30.400	4.680	6.550	3.700	2.300	1.600
18	4.400	11.400	23.600	10.500	9.600	20.000	25.900	4.640	5.900	4.520	2.190	1.630
19	3.900	8.400	39.600	10.800	9.300	14.900	24.100	4.600	6.250	4.080	1.940	1.600
20	3.560	6.550	37.400	11.400	13.500	16.600	23.200	3.620	6.150	3.480	1.770	1.660
21	3.600	6.550	32.200	8.700	16.300	23.200	23.200	3.060	7.800	3.200	2.080	1.700
22	6.280	6.550	30.400	11.800	14.900	58.800	21.600	3.340	7.050	2.440	2.300	1.630
23	4.400	6.100	26.800	29.800	16.600	71.000	19.200	3.200	5.160	2.440	1.980	1.600
24	4.900	20.600	22.400	36.300	42.000	47.300	19.600	3.420	4.120	2.750	1.740	1.560
25	5.000	38.500	19.200	30.400	48.500	44.000	18.400	3.840	3.840	3.420	1.600	2.050
26	4.900	25.900	15.200	27.700	35.200	45.100	16.000	4.520	3.520	3.380	1.630	2.020
27	4.500	20.000	11.400	28.600	49.400	32.200	13.200	4.480	2.890	3.000	1.630	2.050
28	4.150	16.300	12.800	25.000	65.800	25.000	9.600	4.130	2.680	2.720	1.460	4.440
29	3.760	13.800	12.800	20.800		17.000	7.550	6.250	2.500	2.360	1.600	5.160
30	3.640	12.400	12.100	20.000		14.200	6.300	6.300	2.470	1.940	1.600	5.200
31	4.050		10.800	17.700		15.200		4.000		1.980	1.600	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN NORTH PLATTE RIVER
STATION LOCATION NORTH PLATTE RIVER ABOVE
HENRY, NEBRASKA 94

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLOROFORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGENATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	2	61	10	12	2634	217	20	197	1	3	11	2	1	8	0	3	0	0	2
11	9	61	11	15	1360	388	70	318	4	6	34	10	5	15	4	13	2	1	10
12	4	61	12	9	1424	535	122	413	4	11	43	13	5	24	1	54	5	1	4
2	6	62	2	14	3570#	139	19	120	0	4	10	2	1	7	0	2	1	0	2
3	5	62	3	8	1125	289	42	247	0	6	24	9	4	11	0	3	2	1	6
3	8	62	3	17	3849	144	24	120	0	5	11	3	1	7	0	2	1	1	4
4	2	62	4	9	3683	143	38	105	1	11	13	2	1	9	1	4	3	1	5
5	7	62	5	14	4314	162	58	104	1	19	14	2	1	11	0	6	4	1	13
6	4	62	6	12	4334	100	35	65	1	10	10	1	1	8	0	4	2	0	8
7	2	62	7	9	4219	118	28	90	0	5	8	2	0	6	0	3	1	1	10
8	6	62	8	14	4631	128	55	73	2	17	13	2	1	10	0	6	5	1	11
9	3	62	9	10	4200	127	30	97	1	10	8	1	0	7	0	3	2	0	6

ESTIMATED

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEBRASKA

MAJOR BASIN MISSOURI RIVER

MINOR BASIN NORTH PLATTE RIVER

STATION LOCATION NORTH PLATTE RIVER ABOVE
HENRY, NEBRASKA 94

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMI-NATION		ALPHA						BETA						DATE OF DETERMI-NATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	14	0	1	23	7	23	7	10	8	43	14	53	16						
10	9	61	11	8	0	1	34	8	34	8	15	8	56	13	71	15						
10	16	61	10	30	0	1	26	7	26	7	6	8	41	12	47	14						
10	23	61	11	14	1	2	21	6	22	6	0	15	49	20	49	25						
10	30	61	11	7	0	2	12	5	12	5	16	16	81	21	97	26						
11	6	61	11	17	0	1	18	5	18	5	61	7	105	14	166	16						
11	13	61	11	28	0	1	28	8	28	8	19	9	55	13	74	16						
11	20	61	12	7	0	1	37	8	37	8	10	8	60	13	70	15						
11	27	61	12	5	2	1	31	8	33	8	23	8	76	13	99	15						
12	4	61	12	18	0	1	32	8	32	8	14	8	57	13	71	15						
12	11	61	12	20	0	1	32	8	32	8	17	8	52	12	69	14						
12	18	61	1	8	0	1	28	7	28	7	22	8	49	12	71	14						
12	26	61	1	9	0	1	0	2	0	2	5	15	18	20	23	25						
1	2	62	1	18	1	1	42	9	43	9	2	8	44	13	46	15						
1	8	62	1	19	0	2	33	8	33	8	26	17	55	20	81	26						
1	15	62	1	30	0	2	31	8	31	8	12	16	49	20	61	25						
1	21	62	2	6	0	1	14	5	14	5	10	8	47	13	57	15						
1	29	62	2	12	0	1	26	7	26	7	3	8	32	12	35	14						
2	5	62	2	15	0	1	8	3	8	3	16	8	32	9	48	12						
2	12	62	3	5	0	1	43	9	43	9	0	10	69	17	69	20						
2	19	62	2	28	0	1	36	8	36	8	1	7	54	13	55	15						
2	26	62	3	8	0	2	29	8	29	8	9	15	104	21	113	26						
3	5	62	3	19	0	1	29	7	29	7	15	9	48	12	63	15						
3	12	62	3	20	0	1	26	7	26	7	4	11	50	17	54	20						
3	19	62	4	6	1	1	41	8	42	8	22	14	70	20	92	24						
3	26	62	4	4	2	1	37	8	39	8	3	8	50	13	53	15						
4	2	62	4	12	2	1	30	7	32	7	24	9	57	13	81	16						
4	9	62	4	27	0	1	25	6	25	6	17	9	50	12	67	15						
4	16	62	4	27	0	1	39	8	39	8	9	8	44	12	53	14						
4	23	62	5	23	0	1	24	6	24	6	14	11	55	15	69	19						
4	30	62	7	18	1	1	22	6	23	6	7	10	44	15	51	18						
5	7	62	6	11	7	4	18	5	25	6	38	16	49	15	87	22						
5	14	62	6	20	0	1	12	5	12	5	19	16	42	19	61	25						
5	21	62	6	26	2	4	23	6	25	7	50	18	67	16	117	24						
5	27	62	6	28	13	10	29	7	42	12	405	32	91	18	496	37						
6	4	62	7	6	2	2	22	6	24	6	0	31	55	16	55	35						
6	10	62	7	10	2	2	23	6	25	6	52	14	58	16	110	21						
6	18	62	10	6	12	8	1	1	13	8	225	44	13	13	238	46						
6	25	62	7	19	18	15	18	6	36	16	600	83	170	17	770	85						
7	2	62	8	1	10	9	10	4	20	10	231	29	98	18	329	34						
7	9	62	8	13	1	2	13	5	14	5	36	10	101	13	137	16						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN NORTH PLATTE RIVER
STATION LOCATION NORTH PLATTE RIVER ABOVE
HENRY, NEBRASKA 94

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA							DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL					ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±		MO.	DAY	µµc/g	±	µµc/g	±
7	13	62	8	6	5	3	20	5	25	6	69	16	72	15	141	22							
7	23	62	8	10	0	1	12	4	12	4	1	11	49	14	50	19							
7	30	62	8	28	1	2	15	5	16	5	41	14	55	15	96	21							
8	6	62	8	23	2	3	4	3	6	4	33	16	39	15	72	22							
8	13	62	8	30	1	2	14	5	15	5	27	14	40	15	67	21							
8	20	62	9	11	0	1	12	5	12	5	18	8	61	12	79	14							
8	27	62	9	14	3	5	5	3	8	6	22	23	44	18	66	29							
9	4	62	9	20	1	1	15	5	16	5	5	11	49	20	55	23							
9	17	62	10	8	1	1	20	6	21	6	12	11	54	15	66	19							
9	24	62	10	16	0	2	27	6	27	6	16	14	50	16	66	21							

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN NORTH PLATTE RIVER
STATION LOCATION NORTH PLATTE RIVER ABOVE
HENRY, NEBRASKA 94

DATE OF SAMPLE			TOTAL	ALGAE *(Number per milliliter)*								INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
				BLUE-GREEN		GREEN		FLAGELLATED *(Pigmented)*		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	1	61	3700	0	0	0	0	60	0	580	3080	100	640	82	7	73	2	81	2	75	2	68	2	87	1	79	1	71	1	88	1		
10	16	61	1100	0	0	0	0	0	0	130	920	90	890	82	2																		
11	6	61	1400	0	20	0	0	20	0	210	1180	80	460	82	2	88	1																
11	20	61	500	0	0	0	0	0	0	70	420	0	290																				
12	4	61	1800	0	0	0	0	0	0	170	1640	0	350	81	2	82	2	92	1	88	1												
12	18	61	1100	0	220	0	0	20	0	270	630	1070	20	68	1	81	1																
1	2	62	1900	70	20	0	0	50	0	410	1330	0	70	81	2	68	2	92	1	82	1												
1	15	62	700	0	0	0	0	0	0	500	250	0	40	71	2																		
2	5	62	2500	0	0	20	0	20	0	580	1880	60	370	92	2	82	2	71	1	68	1	88	1										
2	19	62	6100	80	80	40	0	460	0	790	4680	60	410	92	4	88	4	82	3	81	3	68	2	51	2								
3	5	62	3800	0	0	0	20	60	40	500	3190	80	810	81	3	92	2	88	2	68	2	73	1	75	1	79	1						
3	19	62	1700	0	0	0	0	0	0	360	1340	50	1410	81	2	68	1	88	1	82	1												
4	2	62	9900	0	0	20	20	40	20	750	9010	80	1350	88	5	92	4	82	4	81	3	68	3	78	2	73	1	80	1	91	1	87	1
4	16	62	4100	0	0	0	20	40	0	350	3730	40	700	73	3	75	3	81	2	77	2	87	2	71	1	88	1	82	1	85	1		
5	7	62	35400	130	40	250	340	0	40	5020	29580	800	27180	68	6	73	5	81	5	82	5	92	5	75	5	87	5	88	4	85	4	84	3
5	21	62	4600	60	0	80	0	20	0	630	3820	210	2070	91	3	88	3	71	2	92	2	82	2	87	2	81	2	84	1				
6	4	62	4700	0	0	0	0	450	0	180	4020	110	2150	87	3	88	3	57	2	82	2	73	2	84	1	97	1	79	1	81	1		
6	18	62	29600	0	0	80	0	0	40	1770	27730	800	14050	82	5	88	5	79	4	92	4	73	4	91	4	87	4	75	4	66	4	97	4
7	2	62	26000	0	40	40	0	210	0	410	25250	250	5800	88	6	92	6	87	5	84	4	82	4	78	4	91	4	81	3	79	3	80	3
7	16	62	700	0	0	0	0	40	60	370	250	20	40	69	1																		
8	6	62	9000	0	0	40	0	0	0	890	8100	630	4980	87	3	82	3	88	3	81	3	85	3	92	3	91	3	79	3	71	2	68	1
8	20	62	3100	0	0	170	0	60	0	630	2190	130	680	87	2	71	1	73	1	88	1	68	1	81	1								
9	4	62	3100	0	80	170	250	40	0	800	1770	80	1390	79	3	71	2	50	1	69	1												
9	17	62	1100	20	0	60	0	30	0	700	260	230	1130	71	2	68	1	79	1														

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN NORTH PLATTE RIVER
STATION LOCATION NORTH PLATTE RIVER ABOVE
HENRY, NEBRASKA 094

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	1	61	36	34	33	12	6	12	2	12	30	20	0	0											0							0	0
10	16	61	36	57	71	8	33	7	92	6	22	20	0	1											0							0	0
11	6	61	36	33	71	18	92	11	33	7	31	0	0	0											0							0	0
11	20	61	36	27	71	11	33	11	92	8	43	0	0	1											0							1	0
12	4	61	33	31	36	20	92	17	71	5	27	40	0	1											0							0	0
12	18	61	36	23	33	22	92	13	71	11	31	630	0	4											0							1	0
1	2	62	33	26	92	20	36	20	71	9	25	110	0	0											0							3	0
1	15	62	33	29	2	11	36	10	6	5	45	0	0	0											0							1	1
2	5	62	92	24	33	17	36	16	71	8	33	40	0	0											0							1	0
2	19	62	92	31	71	27	36	12	33	9	21	80	0	4											0							3	1
3	5	62	92	14	33	13	36	7	71	6	60	150	0	1											0							4	1
3	19	62	33	20	71	14	36	11	86	9	46	20	0	0											0							0	0
4	2	62	71	23	92	21	36	16	33	10	30	80	0	4											2							1	3
4	16	62	6	17	2	12	33	9	9	8	54	0	0	0											2							2	1
5	7	62	48	15	36	11	6	10	92	10	54	0	0	0											9	76	1	50	1			1	1
5	21	62	92	13	71	13	88	10	86	9	55	0	0	0											3							0	0
6	4	62	48	22	71	12	65	10	36	7	49	0	0	1											0							0	0
6	18	62	36	15	92	7	16	6	71	5	67	40	0	0											0							0	0
7	2	62	92	23	71	10	65	8	36	6	53	210	0	-											-							-	-
7	16	62	36	11	92	10	58	9	16	8	62	0	0	0											0							0	0
8	6	62	36	13	51	9	92	9	33	9	60	0	0	0											0							0	0
8	20	62	58	22	26	8	83	6	6	4	60	0	0	0											0							0	0
9	4	62	15	50	36	14	58	11	83	5	20	0	0	0											0							0	0
9	17	62	16	48	36	13	82	6	26	4	29	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEBRASKA

MAJOR BASIN MISSOURI RIVER

MINOR BASIN NORTH PLATTE RIVER

STATION LOCATIONNORTH PLATTE RIVER ABOVE
HENRY, NEBRASKA 94

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	10.5	7.3	8.1	1.2	-	8.0	16.1	-	18	210	250	6	0	-	-	-	3100
10	9	61	8.5	8.5	8.1	7.4	-	-	-	-	21	220	245	12	34	-	-	-	7000
10	16	61	12.5	7.1	8.1	-	-	-	-	-	23	240	235	12	52	260	-	-	19000
10	23	61	6.0	9.0	8.0	-	-	-	-	-	24	240	270	15	53	-	-	588	9500
10	30	61	4.5	9.0	8.1	38.2	-	-	-	-	25	246	260	17	52	275	-	660	-
11	6	61	4.6	9.5	8.1	33.0	67	-	-	-	25	248	250	15	54	275	1.1	700	47000
11	13	61	4.9	8.8	8.0	34.7	82	-	-	-	26	250	285	16	55	198	.2	670	46000
11	20	61	2.0	8.8	8.0	47.0	83	-	-	-	27	230	290	17	43	190	.6	650	24000
11	27	61	5.0	7.7	8.1	52.0	80	-	-	-	28	240	250	15	45	264	.0	730	21000
12	4	61	4.0	8.0	8.1	37.3	87	-	-	-	27	250	260	16	43	-	.0	700	24000
12	11	61	.0	9.5	8.1	44.0	121	-	-	-	30	276	280	19	45	250	.0	710	22000
12	18	61	2.0	9.4	8.0	33.5	113	-	-	-	34	250	240	16	47	-	.0	690	53000
12	26	61	4.0	7.3	8.1	59.0	81	-	-	-	40	280	250	18	52	300	.4	970	93000
1	2	62	1.5	10.0	8.1	11.6	40	-	-	-	35	248	230	12	15	220	.4	650	3600
1	8	62	.0	11.0	8.1	2.2	43	-	-	-	37	252	240	12	25	260	.5	-	9500
1	15	62	.0	9.4	8.0	3.1	30	-	-	-	33	240	250	11	12	290	.4	630	5600
1	22	62	.0	8.5	8.0	3.3	34	-	-	-	31	250	260	12	10	205	.4	660	2700
1	29	62	.0	9.8	8.0	3.6	39	-	-	-	30	220	230	15	10	175	.0	580	7500
2	5	62	.0	11.3	8.0	1.3	14	-	-	-	28	230	250	16	10	175	.0	650	3300
2	12	62	-	9.4	8.1	2.3	25	-	-	-	31	210	230	18	45	-	.5	650	5000
2	19	62	2.5	11.1	8.0	3.1	17	-	-	-	29	186	230	20	33	-	.4	590	2800
2	26	62	.0	11.3	8.1	4.5	12	-	-	-	31	210	240	13	25	180	.4	590	1000
3	5	62	1.0	11.4	8.0	2.4	6	-	-	-	28	192	256	15	52	200	.5	530	920
3	12	62	.0	12.2	8.0	3.1	14	-	-	-	28	192	260	16	55	235	.4	610	630
3	19	62	7.0	11.1	8.0	3.6	6	-	-	-	29	200	224	15	85	250	.4	580	*17
3	26	62	9.0	10.8	8.0	3.4	19	-	-	-	31	184	208	12	85	235	.4	690	5500
4	2	62	4.0	10.9	8.0	4.9	23	-	-	-	28	166	200	23	185	220	.4	540	5300
4	9	62	7.0	11.3	8.0	2.9	19	-	-	-	27	162	208	22	170	215	.4	560	690
4	16	62	9.0	10.7	8.0	4.5	14	-	-	-	28	174	224	21	90	245	.4	600	3000
4	23	62	14.5	9.2	8.3	3.3	22	-	-	-	28	158	216	17	110	200	.4	-	170
4	30	62	12.0	9.5	8.2	3.0	12	-	-	-	28	160	208	25	97	192	.4	-	3800
5	7	62	15.0	7.0	8.0	6.8	42	-	-	-	28	124	232	25	600	255	.4	-	-
5	14	62	15.0	8.1	8.0	2.0	20	-	-	-	28	120	216	22	300	237	.4	603	2500
5	21	62	15.0	8.1	8.0	2.0	16	-	-	-	30	160	232	20	350	237	.4	565	4000
5	28	62	15.0	7.8	8.1	4.4	33	-	-	-	33	176	216	56	1440	180	.4	592	-
6	11	62	21.0	8.1	8.1	3.0	21	-	-	-	30	162	200	40	175	205	.4	501	2100
6	4	62	17.0	8.7	8.1	2.4	13	-	-	-	18	164	208	30	275	187	.4	540	10000
6	18	62	19.0	7.6	8.0	3.8	31	-	-	-	26	198	176	60	200	170	.4	451	12000
6	25	62	19.0	7.4	8.0	6.9	39	-	-	-	35	224	224	60	4000	150	.4	576	220000

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEBRASKA

MAJOR BASIN MISSOURI RIVER

MINOR BASIN NORTH PLATTE RIVER

STATION LOCATION NORTH PLATTE RIVER ABOVE
HENRY, NEBRASKA 94

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	2	62	22.0	6.3	8.0	5.6	52	-	-	-	36	180	184	120	2400	177	.4	421	-
7	9	62	23.0	7.1	8.0	2.5	6	-	-	-	28	96	244	28	400	270	.4	541	3000
7	16	62	20.0	8.1	8.0	2.1	13	-	-	-	15	130	208	22	500	162	.4	472	7000
7	23	62	20.0	7.5	8.0	2.5	12	-	-	-	20	124	184	20	450	180	.4	466	5000
7	30	62	21.0	7.9	8.0	2.0	4	-	-	-	22	122	224	17	425	140	.4	436	4200
8	6	62	21.0	7.5	8.0	1.1	2	-	-	-	20	120	236	16	800	200	.4	492	2000
8	13	62	21.0	8.1	8.1	1.4	21	-	-	-	17	112	200	16	270	196	.4	424	2100
8	20	62	21.0	8.1	8.1	1.6	-	-	-	-	18	116	218	16	300	215	.4	420	900
8	27	62	21.0	8.1	8.1	1.7	-	-	-	-	20	142	216	14	260	205	.4	445	900
9	4	62	15.0	9.0	8.2	1.8	-	-	-	-	20	150	248	13	175	175	.4	520	*170
9	10	62	11.0	9.8	8.0	1.5	11	-	-	-	19	176	240	15	150	220	.4	531	2000
9	17	62	12.0	8.4	8.0	1.7	0	-	-	-	20	180	232	15	150	260	.4	540	2700
9	24	62	16.0	8.4	8.0	1.4	-	-	-	-	21	180	240	18	100	208	.4	554	1000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Wyoming-Nebraska State Line
Operated by U.S. Geological Survey

STATE	Nebraska
MAJOR BASIN	Missouri River
MINOR BASIN	North Platte River
STATION LOCATION	North Platte River above Henry, Nebraska

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.295	.320	.305	.260	.260	.182	.374	.280	.565	1.000	1.140	1.160
2	.246	.315	.300	.255	.265	.222	.350	.260	.537	1.260	1.120	1.140
3	.230	.310	.305	.255	.265	.234	.335	.270	.544	1.160	1.030	1.100
4	.230	.310	.310	.255	.270	.234	.315	.270	.621	.810	.912	1.010
5	.238	.305	.310	.260	.265	.242	.310	.265	.635	.544	.852	1.010
6	.234	.305	.310	.260	.265	.265	.320	.383	.614	.416	.960	.968
7	.222	.305	.305	.260	.255	.270	.345	.817	.621	.345	1.320	.896
8	.280	.305	.305	.230	.250	.270	.356	.888	.642	.423	1.160	.810
9	.374	.305	.285	.196	.246	.285	.345	1.100	.614	.859	.960	.782
10	.380	.305	.280	.178	.250	.300	.335	1.100	.621	1.020	1.010	.761
11	.362	.310	.270	.164	.255	.300	.320	1.210	.656	.912	1.090	.761
12	.356	.310	.265	.150	.250	.280	.300	1.310	.649	.852	1.150	.705
13	.362	.305	.265	.144	.250	.270	.295	1.300	.684	1.020	1.100	.628
14	.362	.300	.250	.138	.250	.270	.290	1.290	.558	1.200	1.070	.600
15	.362	.300	.260	.138	.255	.270	.285	1.280	.656	.960	1.050	.565
16	.345	.295	.260	.144	.285	.265	.270	.968	.691	.904	1.070	.551
17	.340	.305	.255	.140	.295	.260	.270	.530	.904	.817	1.130	.551
18	.335	.310	.260	.128	.290	.260	.285	.593	.944	.761	1.140	.544
19	.335	.310	.265	.118	.285	.246	.290	.607	.912	.733	1.200	.506
20	.340	.305	.265	.115	.280	.242	.280	.452	.859	.726	1.220	.476
21	.340	.305	.280	.110	.265	.242	.275	.446	.817	.952	1.170	.476
22	.330	.300	.275	.105	.260	.238	.285	.488	.912	1.060	1.150	.494
23	.310	.305	.270	.105	.255	.234	.295	.428	.984	1.330	1.180	.506
24	.305	.310	.270	.128	.234	.234	.310	.392	.747	1.420	1.220	.494
25	.305	.310	.275	.135	.218	.230	.226	.579	.663	1.340	1.230	.494
26	.310	.315	.280	.138	.206	.234	.158	.838	.565	1.250	1.210	.464
27	.310	.315	.275	.164	.196	.238	.154	.761	.635	1.130	1.210	.434
28	.315	.315	.246	.206	.182	.242	.214	.796	.768	1.110	1.160	.428
29	.320	.310	.260	.242		.250	.265	.628	.992	1.160	1.130	.524
30	.320	.300	.255	.246		.280	.285	.558	.831	1.190	1.150	.649
31	.315		.255	.250		.386		.565		1.210	1.230	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE ILLINOIS
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
CAIRO, ILLINOIS 35

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY					
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA			
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±		
12	27	61	1	10	2	2	0	1	2	2	24	7	17	5	41	9								
1	2	62	1	12	-	-	-	-	-	-	30	8	13	7	43	11								
1	8	62	1	15	5	3	1	1	6	3	62	10	20	7	82	12								
1	15	62	1	29	-	-	-	-	-	-	127	13	30	8	157	15								
1	22	62	2	1	-	-	-	-	-	-	95	9	29	7	124	12								
1	29	62	2	12	5	4	0	1	5	4	88	9	32	6	120	11								
2	5	62	2	14	-	-	-	-	-	-	61	10	41	10	102	14								
2	11	62	2	21	2	2	0	1	2	2	74	8	39	6	113	10								
2	19	62	3	6	-	-	-	-	-	-	41	9	11	7	52	11								
2	26	62	3	12	-	-	-	-	-	-	132	13	32	8	164	15								
3	5	62	3	16	-	-	-	-	-	-	121	13	36	7	157	15								
3	12	62	3	20	2	2	1	1	3	2	69	10	29	6	98	12								
3	19	62	4	6	-	-	-	-	-	-	57	7	32	6	89	9								
3	28	62	4	12	-	-	-	-	-	-	102	10	36	8	138	13								
4	2	62	4	12	-	-	-	-	-	-	95	9	42	8	137	12								
4	10	62	4	27	14	7	0	2	14	7	158	17	14	5	172	18								
4	23	62	5	25	-	-	-	-	-	-	30	9	19	8	49	12								
4	30	62	5	25	-	-	-	-	-	-	25	10	8	9	33	13								
5	7	62	6	19	-	-	-	-	-	-	21	10	15	9	36	13								
5	14	62	6	20	1	1	0	1	1	1	15	8	14	9	29	12								
5	21	62	6	27	-	-	-	-	-	-	2	6	20	8	22	10								
5	29	62	6	28	-	-	-	-	-	-	6	6	26	7	32	9								
6	5	62	7	6	-	-	-	-	-	-	0	5	18	6	18	8								
6	11	62	7	9	0	1	1	1	1	1	2	6	23	8	25	10								
6	18	62	7	17	-	-	-	-	-	-	7	5	19	8	26	9								
6	26	62	7	24	-	-	-	-	-	-	4	5	23	7	27	9								
7	2	62	8	6	-	-	-	-	-	-	1	5	22	7	23	9								
7	10	62	8	7	0	1	1	1	1	1	2	5	26	8	28	9								
7	16	62	8	14	-	-	-	-	-	-	5	5	24	7	29	8								
7	23	62	8	15	-	-	-	-	-	-	0	6	19	7	19	9								
7	31	62	8	21	-	-	-	-	-	-	9	5	23	5	32	7								
8	7	62	9	30	-	-	-	-	-	-	14	11	11	15	25	19								
8	27	62	9	11	0	0	0	0	0	0	1	4	20	7	21	8								
9	4	62	9	28	-	-	-	-	-	-	16	7	16	8	32	11								
9	10	62	9	26	0	0	0	0	0	0	1	6	24	9	25	11								
9	17	62	10	14	-	-	-	-	-	-	2	5	15	7	17	9								
9	24	62	10	17	-	-	-	-	-	-	2	7	10	8	12	11								

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NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ILLINOIS
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
CAIRO, ILLINOIS 35

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	2700	80	80	730	0	80	0	1640	80	150	40	69	7	35	2	71	1	68	1												
10	16	61	5300	80	80	930	60	100	20	3830	210	600	170	69	4	71	4	68	3	38	1	35	1	92	1								
11	7	61	1300	0	20	250	180	20	0	630	160	670	70	71	2	68	1	50	1														
11	20	61	2400	20	0	60	0	40	0	2150	120	0	20	71	4	68	2																
12	5	61	2900	0	0	470	0	180	0	1990	220	1650	940	69	3	68	2	38	1	57	1												
12	18	61	2300	0	0	120	0	80	0	1330	730	290	210	69	3	68	2	71	1	92	1	82	1										
1	2	62	1300	0	0	60	0	20	0	620	600	80	310	69	2	94	2																
1	15	62	1700	0	0	60	0	60	0	540	1060	350	440	82	2	92	2	69	1	68	1												
2	5	62	1100	0	0	20	0	80	0	330	680	150	120	68	1																		
2	19	62	500	0	0	50	0	50	0	160	270	20	140																				
3	5	62	600	0	0	20	0	20	0	280	300	0	110	69	1																		
3	19	62	200	0	0	0	0	50	0	110	90	0	50																				
4	2	62	600	0	0	0	0	60	0	190	370	100	60																				
4	17	62	1900	20	0	0	0	330	100	930	540	270	270	92	2	69	1	51	1	68	1	71	1	82	1								
5	7	62	2400	150	0	130	0	60	0	1650	420	3590	610	71	4	68	2	92	1														
5	21	62	2800	0	60	270	320	40	0	1650	510	380	170	71	4	50	2	68	1	69	1												
6	5	62	10400	7740	0	290	0	210	40	1660	500	660	210	4	6	71	3	69	2	68	2	92	1	51	1								
6	18	62	1500	0	0	150	60	0	0	530	800	1690	1600	92	3	68	1	69	1														
7	2	62	1700	0	0	0	380	0	0	680	680	340	0	92	2	50	2	84	2	68	1	69	1										
7	16	62	200	0	0	90	0	0	0	50	50	70	180																				
8	7	62	300	0	0	40	40	60	0	40	120	40	0																				
8	22	62	100	0	0	0	0	40	0	40	40	0	0																				
9	4	62	100	0	0	0	0	0	40	0	80	0	0																				
9	17	62	300	0	0	0	0	0	0	0	330	0	0																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ILLINOIS
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
CAIRO, ILLINOIS 035

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																		
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
10	2	61	82	38	26	36	56	8	84	3	15	0	10	98	11	4	17	1	22	1					9	52	1	53	1			0	0
10	16	61	56	57	82	10	89	9	26	9	15	0	0	113	11	3	17	3	22	3					20	51	3	76	1			0	0
11	7	61	82	34	56	31	26	8	89	8	19	0	0	127	11	5	17	2	22	1					3							0	0
11	20	61	82	47	56	24	26	10	89	7	12	2110	0	11	11	1									2							0	0
12	5	61	56	85	58	4	92	4	10	2	5	0	0	30	11	3									3	51	1					0	0
12	18	61	56	65	36	5	92	5	16	3	22	0	0	2											0							0	0
1	2	62	56	22	89	8	92	7	58	7	56	0	0	0											0							0	0
1	15	62	36	19	56	19	92	16	62	8	38	0	0	0											0							0	0
2	5	62	56	22	36	11	92	11	62	11	46	0	0	0											0							0	0
2	19	62										0	0	0											1							0	0
3	5	62	56	31	92	11	47	7	62	6	45	20	0	0											0							0	0
3	19	62	92	15	56	10	26	9	65	5	61	70	0	0											0							0	0
4	2	62	47	22	92	16	62	10	36	7	45	40	0	0											0							0	0
4	17	62	92	19	56	17	89	7	36	7	50	0	0	0											0							0	0
5	7	62	82	46	92	13	56	9	26	7	25	20	0	0											1							0	0
5	21	62	82	27	56	26	57	8	58	7	32	0	0	5											2							0	0
6	5	62	82	24	56	21	26	14	92	11	30	40	0	42	22	3									3							0	0
6	18	62	92	61	56	12	58	5	45	3	19	0	0	0											1							0	0
7	2	62	45	39	92	22	56	11	26	8	20	0	0	3											1							0	0
7	16	62	56	44	82	18	26	7	92	6	25	0	0	2											0							0	0
8	7	62	26	48	58	13	92	8	56	8	23	0	0	0											0							0	0
8	22	62	82	27	26	10	56	8	58	7	48	0	0	0											0							0	0
9	4	62	56	20	26	16	82	11	58	7	46	0	0	0											3	51	1					0	2
9	17	62	26	14	92	11	82	8	68	8	59	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE ILLINOIS

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER MAIN STEM & MINOR TRIB.

STATION LOCATION OHIO RIVER AT
CAIRO, ILLINOIS 35

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	6	61	11	15	1866	385	79	306	2	19	32	4	1	25	2	8	5	2	11
12	13	61	12	26	3347	186	80	106	2	22	25	5	5	15	0	9	7	1	14
1	24	62	2	11	2537	298	152	146	14	38	41	5	5	27	4	14	14	3	28
3	2	62	3	13	4942	122	59	63	3	14	18	3	3	11	1	7	7	1	9
4	9	62	4	23	6355	90	36	54	1	8	14	2	2	9	1	4	5	0	4
5	18	62	5	29	5079	124	60	64	1	16	18	2	1	14	1	5	7	1	12
6	25	62	7	13	5202	150	80	70	1	20	26	2	2	21	1	10	8	1	14
8	18	62	8	27	4656	165	63	102	1	15	20	2	1	16	1	9	5	1	12

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	ILLINOIS
MAJOR BASIN	OHIO RIVER
MINOR BASIN	OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION	OHIO RIVER AT CAIRO, ILLINOIS 35

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	9	61	14.8	10.8	7.5	1.7	9	.2	2.5	.0	23	78	126	-	20	-	-	-	-
10	16	61	19.9	13.3	7.9	2.1	-	.3	2.5	.0	18	72	118	-	55	-	-	-	-
10	23	61	17.0	10.5	7.5	2.0	-	.3	2.2	.0	20	74	110	-	30	-	-	-	-
10	30	61	17.0	10.7	7.5	2.1	-	.3	2.3	.0	12	80	122	-	48	-	-	-	-
11	13	61	14.0	12.0	7.7	1.6	-	.2	2.5	.0	31	75	136	-	20	-	-	-	-
11	15	61	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-
11	20	61	12.0	12.0	7.5	2.4	-	.2	2.8	.0	27	78	156	-	30	-	-	-	-
11	27	61	10.9	10.9	7.5	2.4	-	.2	2.5	.0	34	75	136	-	48	-	-	-	-
12	5	61	10.4	10.2	7.6	1.5	-	.3	2.6	-	40	76	198	-	130	-	-	-	-
12	11	61	7.4	12.7	7.5	2.8	-	.2	2.2	-	32	68	160	-	190	-	-	-	-
12	19	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10000
12	20	61	6.0	12.9	7.3	2.6	-	.2	1.8	-	23	74	144	-	250	-	-	-	-
12	26	61	5.9	12.4	7.5	4.0	22	.2	1.8	-	19	64	108	-	350	-	-	-	-
12	27	61	-	-	-	-	-	-	-	-	16	-	-	-	-	50	.0	-	3500
1	2	62	4.4	13.5	7.5	4.1	-	.2	2.3	-	18	68	116	-	350	55	.0	176	4200
1	8	62	4.2	14.8	7.5	4.6	-	.3	2.2	-	20	70	120	-	180	46	.0	-	2100
1	15	62	1.6	14.3	7.5	4.4	-	.4	2.6	-	16	85	140	-	400	48	-	-	11000
1	22	62	1.6	14.5	7.5	3.3	-	.4	2.4	-	8	66	118	-	360	45	-	-	3600
1	29	62	-	-	-	-	-	-	-	-	11	-	-	-	-	39	-	-	6000
2	5	62	-	-	-	-	-	-	-	-	14	-	-	-	-	38	-	156	2900
2	11	62	-	-	-	-	18	-	-	-	13	-	-	-	-	50	-	-	300
2	19	62	5.3	13.9	7.5	3.9	-	.2	2.8	-	18	85	140	-	150	-	-	-	2600
2	26	62	7.0	14.3	7.5	3.6	-	.2	2.4	-	15	73	112	-	450	50	.0	-	7300
3	5	62	6.2	13.3	7.4	4.2	-	.2	2.4	-	4	65	116	-	625	-	-	-	8000
3	12	62	6.0	12.3	7.2	2.3	-	.2	2.2	.7	10	40	90	-	400	-	-	-	3200
3	19	62	6.3	11.5	7.4	2.4	-	.2	2.3	.2	11	68	114	-	160	-	-	-	1200
3	28	62	9.0	11.1	7.5	2.3	-	.3	2.3	.7	12	70	122	-	280	-	-	-	1600
4	2	62	9.9	11.2	7.3	2.3	-	.2	2.5	.4	12	66	110	0	230	49	.1	-	2600
4	9	62	9.9	11.5	7.5	2.6	-	.2	2.4	.7	13	68	120	-	200	-	-	-	-
4	10	62	10.8	11.3	7.5	2.1	-	.3	1.8	-	10	62	220	-	-	40	.1	167	620
4	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	800
4	23	62	12.6	11.1	7.5	1.9	26	.2	2.1	.4	9	55	106	10	170	-	-	-	2100
4	30	62	16.2	9.7	7.4	2.6	-	.2	2.8	.4	14	65	124	-	115	-	-	-	1100
5	8	62	18.6	9.2	7.5	2.4	-	.3	2.6	.2	12	80	144	5	130	68	-	-	-
5	14	62	23.0	8.4	7.5	1.9	-	.3	2.8	.0	8	82	146	10	80	60	-	-	-
5	21	62	25.2	7.8	7.6	1.6	-	.2	2.6	.2	13	85	144	-	85	-	-	-	300
5	28	62	26.4	8.2	7.7	1.6	20	.2	2.5	.2	21	82	120	10	60	54	-	-	-
6	5	62	26.0	7.5	7.5	1.2	-	.2	2.4	.2	10	85	136	10	35	62	.0	-	2300
6	11	62	2.7	7.4	7.5	1.4	21	.2	2.4	.0	17	82	140	-	40	-	-	-	100

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NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ILLINOIS

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATIONOHIO RIVER AT

CAIRO, ILLINOIS 35

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	18	62	26.8	6.7	7.6	1.6	-	.2	2.3	.2	18	90	140	-	160	-	-	-	790
6	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300
7	10	62	28.0	6.5	7.4	1.2	-	.2	2.5	.0	25	67	140	-	110	-	-	-	100
7	16	62	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	*100
7	23	62	29.5	6.8	7.4	1.2	-	.3	2.2	.2	26	62	110	10	80	45	.0	180	300
7	31	62	28.7	8.2	7.6	.9	-	.2	2.1	.0	12	78	124	5	40	45	.0	200	200
8	7	62	29.2	8.4	7.5	1.1	-	.3	2.4	.0	17	74	106	10	50	30	.0	-	300
8	13	62	28.8	8.5	7.6	1.0	-	.2	2.3	.2	14	78	100	-	35	-	-	-	11000
8	20	62	28.8	8.5	7.5	1.2	-	.2	1.9	.0	17	75	110	-	25	-	-	-	900
8	27	62	28.0	8.5	7.5	1.0	13	.2	1.8	.2	17	62	-	-	-	-	-	-	1100
9	4	62	27.5	8.0	7.5	.8	-	.3	1.8	.2	19	65	100	-	110	-	-	-	4900
9	10	62	25.8	8.7	7.4	.8	-	.5	1.8	.3	23	68	104	-	35	-	-	-	3000
9	17	62	25.0	8.3	7.5	.8	-	.2	1.2	.2	18	54	108	-	62	-	-	-	1200
9	24	62	23.8	9.4	7.5	.6	-	.2	1.2	.3	13	60	100	5	25	40	.0	175	100

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Metropolis, Illinois
Operated by U.S. Geological Survey

STATE Illinois
MAJOR BASIN Ohio River
MINOR BASIN Ohio River-Main Stem & Minor Trib.
STATION LOCATION Ohio River at
Cairo, Illinois

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	87.000	89.100	198.000	318.000	722.000	902.000	680.000	290.000	144.000	119.000	107.000	77.100
2	96.100	77.800	208.000	292.000	713.000	978.000	660.000	284.000	160.000	117.000	116.000	80.600
3	84.300	93.400	204.000	275.000	707.000	1030.000	671.000	279.000	153.000	111.000	106.000	94.200
4	83.500	102.000	198.000	263.000	694.000	1030.000	696.000	275.000	147.000	106.000	102.000	104.000
5	96.900	101.000	162.000	238.000	672.000	1020.000	685.000	268.000	154.000	105.000	99.500	110.000
6	91.900	98.700	112.000	233.000	646.000	1030.000	672.000	262.000	152.000	127.000	91.100	105.000
7	92.900	95.000	125.000	289.000	600.000	1030.000	662.000	257.000	145.000	153.000	86.000	85.700
8	82.400	103.000	131.000	360.000	549.000	1050.000	649.000	251.000	147.000	168.000	97.800	83.800
9	83.300	119.000	146.000	388.000	490.000	1060.000	647.000	243.000	183.000	154.000	108.000	80.600
10	98.800	115.000	208.000	404.000	453.000	1080.000	634.000	232.000	151.000	139.000	103.000	86.900
11	85.700	99.200	276.000	413.000	425.000	1090.000	651.000	212.000	134.000	139.000	98.100	74.400
12	75.700	98.900	332.000	408.000	391.000	1080.000	670.000	188.000	149.000	130.000	88.700	81.100
13	77.200	91.400	348.000	411.000	395.000	1070.000	700.000	180.000	178.000	136.000	81.800	70.000
14	77.000	142.000	372.000	402.000	393.000	1040.000	709.000	200.000	184.000	120.000	84.200	98.800
15	65.900	151.000	399.000	427.000	380.000	1000.000	724.000	213.000	182.000	113.000	74.900	96.800
16	77.500	144.000	411.000	435.000	367.000	977.000	727.000	196.000	179.000	135.000	72.000	91.800
17	79.100	136.000	429.000	421.000	357.000	944.000	730.000	189.000	174.000	141.000	75.300	94.600
18	71.100	128.000	471.000	401.000	345.000	907.000	733.000	181.000	171.000	162.000	77.400	100.000
19	84.400	125.000	516.000	384.000	334.000	875.000	734.000	155.000	154.000	197.000	69.700	109.000
20	75.400	133.000	546.000	368.000	315.000	846.000	730.000	108.000	134.000	189.000	65.900	107.000
21	83.500	133.000	570.000	358.000	300.000	822.000	715.000	122.000	132.000	125.000	70.300	94.100
22	91.900	135.000	579.000	377.000	301.000	783.000	687.000	133.000	143.000	126.000	60.600	77.900
23	92.300	166.000	590.000	411.000	328.000	743.000	642.000	123.000	135.000	132.000	62.700	69.900
24	101.000	161.000	606.000	484.000	407.000	706.000	578.000	123.000	132.000	125.000	69.500	73.100
25	103.000	171.000	612.000	566.000	481.000	653.000	497.000	118.000	140.000	113.000	70.000	75.900
26	111.000	170.000	614.000	618.000	581.000	590.000	430.000	112.000	141.000	141.000	67.100	71.600
27	107.000	173.000	583.000	664.000	695.000	578.000	371.000	118.000	139.000	130.000	81.000	76.100
28	94.500	171.000	523.000	689.000	824.000	587.000	333.000	133.000	124.000	126.000	73.200	76.700
29	86.700	176.000	440.000	713.000		610.000	314.000	143.000	126.000	120.000	72.000	74.300
30	89.600	187.000	397.000	721.000		632.000	300.000	147.000	127.000	115.000	79.100	79.000
31	92.000		354.000	722.000		658.000		153.000		104.000	73.600	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE INDIANA

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION OHIO RIVER AT
EVANSVILLE, INDIANA 36

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	13	-	-	-	-	-	-	2	4	16	6	18	7						
10	9	61	10	19	0	1	1	2	1	2	0	4	6	6	6	7						
10	16	61	10	25	0	1	0	1	0	1	0	4	10	6	10	7						
10	23	61	10	31	-	-	-	-	-	-	64	12	56	14	120	18						
10	30	61	11	3	-	-	-	-	-	-	0	10	9	12	9	16						
11	6	61	11	17	-	-	-	-	-	-	5	8	14	10	19	13						
11	13	61	11	28	0	1	0	2	0	2	14	8	46	12	60	14						
11	20	61	11	28	-	-	-	-	-	-	13	11	14	13	27	17						
11	27	61	12	1	-	-	-	-	-	-	15	6	17	8	32	10						
12	5	61	12	12	-	-	-	-	-	-	15	5	21	7	36	9						
12	11	61	12	18	3	1	0	1	3	1	27	6	15	6	42	8						
12	18	61	12	28	-	-	-	-	-	-	5	5	15	5	20	7						
1	2	62	1	12	-	-	-	-	-	-	16	8	11	7	27	11						
1	8	62	1	18	2	1	1	1	3	1	20	6	15	5	35	8						
1	15	62	1	24	-	-	-	-	-	-	65	9	18	6	83	11						
1	22	62	1	31	-	-	-	-	-	-	71	9	26	7	97	11						
1	29	62	2	8	-	-	-	-	-	-	43	7	20	5	63	9						
2	5	62	2	13	-	-	-	-	-	-	23	7	24	7	47	10						
2	13	62	2	20	2	2	0	1	2	2	52	7	20	5	72	9						
2	19	62	3	2	-	-	-	-	-	-	13	6	17	7	30	9						
2	26	62	3	9	-	-	-	-	-	-	66	16	19	7	85	17						
3	5	62	3	16	-	-	-	-	-	-	77	12	1	6	78	13						
3	12	62	3	23	3	1	0	1	3	1	38	6	29	5	67	8						
3	19	62	4	4	-	-	-	-	-	-	47	8	17	7	64	11						
3	26	62	4	17	-	-	-	-	-	-	174	14	42	8	216	16						
4	2	62	4	12	-	-	-	-	-	-	51	8	14	7	65	11						
4	9	62	4	23	5	3	0	1	5	3	69	12	21	6	90	-						
4	16	62	4	30	-	-	-	-	-	-	41	7	16	5	57	9						
4	23	62	5	22	-	-	-	-	-	-	27	10	12	8	39	13						
4	30	62	5	25	-	-	-	-	-	-	6	7	16	9	22	12						
5	7	62	6	8	-	-	-	-	-	-	50	5	68	7	118	9						
5	14	62	6	22	0	0	1	1	1	1	5	7	14	9	19	11						
5	21	62	6	28	-	-	-	-	-	-	0	6	6	8	6	10						
5	28	62	6	29	-	-	-	-	-	-	21	4	23	4	44	6						
6	4	62	7	3	-	-	-	-	-	-	6	5	17	7	23	9						
6	11	62	7	9	0	1	0	1	0	1	24	7	34	9	58	11						
6	18	62	7	13	-	-	-	-	-	-	16	7	23	5	39	9						
6	25	62	7	20	-	-	-	-	-	-	7	3	21	4	28	5						
8	6	62	8	23	-	-	-	-	-	-	21	6	19	7	40	9						
8	13	62	8	23	0	0	0	1	0	1	6	5	27	8	33	9						
8	20	62	9	5	-	-	-	-	-	-	5	5	22	8	27	9						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE INDIANA

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION OHIO RIVER AT

EVANSVILLE, INDIANA 36

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
9	4	62	9	28	-	-	-	-	-	-	2	5	20	7	22	9						
9	10	62	9	27	0	1	3	2	3	2	3	7	87	11	90	13						
9	17	62	10	9	-	-	-	-	-	-	8	7	19	10	27	12						
9	24	62	10	16	-	-	-	-	-	-	7	6	18	8	25	10						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE INDIANA
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
EVANSVILLE, INDIANA 36

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	4100	190	770	1530	20	210	0	1160	210	120	20	31	3	12	3	71	2	69	2	51	1	24	1	68	1	21	1				
10	16	61	5900	120	930	2570	0	410	210	1350	290	120	40	31	3	69	3	16	2	12	2	38	2	35	2	51	2	68	2	60	1	92	1
11	6	61	4100	20	40	1220	0	720	40	1720	370	210	150	71	4	69	3	51	2	68	2	38	1	35	1	31	1	92	1				
11	20	61	1900	0	0	390	20	100	40	1160	150	170	80	69	3	71	1	24	1														
12	5	61	2400	0	0	150	0	60	0	1620	350	460	350	68	4	69	2	92	1														
12	18	61	300	0	0	90	0	20	0	50	90	0	50																				
1	2	62	1500	0	20	20	0	20	50	560	830	50	0	69	2	92	1	68	1														
1	15	62	600	0	0	0	0	0	0	310	290	290	1030	69	1																		
2	5	62	900	0	0	20	0	20	0	160	650	90	230	82	1	92	1																
2	19	62	600	0	0	0	20	50	0	180	320	50	140																				
3	5	62	500	0	0	0	0	0	0	320	190	110	150	69	1																		
3	19	62	300	0	0	0	0	0	0	50	270	0	110																				
4	2	62	800	0	0	0	0	80	20	230	440	60	40																				
4	16	62	1800	0	0	70	0	160	20	770	790	340	790	88	1	68	1	69	1	91	1	92	1	82	1								
5	7	62	5400	0	400	1140	170	150	60	2570	890	2570	870	71	4	68	2	77	2	17	2	69	2	24	2	38	1	25	1	50	1		
5	21	62	49000	40	250	3560	0	2860	290	37530	4510	1780	170	69	8	92	5	71	5	51	4	69	3	24	3	57	3	82	2	35	2	21	1
6	4	62	13400	40	680	2030	*	80	40	6160	2950	7390	2800	69	5	92	5	50	4	71	4	68	4	17	2	24	2	16	1	25	1	32	1
6	18	62	17200	12070	0	1430	0	0	0	2410	1270	2070	1350	2	7	63	4	92	3	40	2	35	2	24	1								
7	2	62	29900	1220	130	19830	170	420	0	6120	2030	1180	1010	24	7	69	6	26	5	84	4	38	3	31	3	2	3	30	2	3	2		
7	16	62	10900	620	40	4720	*	1280	40	460	870	120	330	24	5	50	5	51	3	92	2	3	2	35	2	69	1	30	1				
8	6	62	2100	0	0	170	0	40	0	1480	380	760	170	69	3	69	2																
8	20	62	2200	80	130	460	320	300	0	680	190	40	130	69	2	51	1	50	1														
9	4	62	2800	210	40	300	0	0	0	1180	1060	380	630	68	2	71	2	87	2	69	1	88	1	2	1	24	1						
9	17	62	500	20	0	210	0	70	70	160	0	20	90																				
*6	4	62					1390																										
*7	16	62					2900																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE INDIANA
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
EVANSVILLE, INDIANA 036

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml	MICROINVERTEBRATES																	
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml	NUM-BER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUM-BER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
10	2	61										20	10	171	11	5	17	4	22	3					46	50	4	76	1			0	0
10	16	61	56	59	89	19	58	4	82	4	14	0	40	237	17	5	21	4	11	3	22	4			208	50	5	76	4	53	3	0	0
11	6	61	56	51	89	19	82	7	92	6	17	0	0	116	11	5	22	2							6							0	0
11	20	61	56	87	89	4	57	4	58	2	3	0	0	183	11	5	21	2	18	1	22	1	2	1	2							0	0
12	5	61	56	76	92	6	58	6	89	4	8	0	0	9											0							0	0
12	18	61										160	0	3											0							0	0
1	2	62	56	26	47	9	62	8	89	8	49	250	0	1											0							0	0
1	15	62	56	34	92	14	62	9	89	7	36	90	0	0											0							0	0
2	5	62	56	18	92	15	56	8	26	6	53	0	0	0											0							0	0
2	19	62										20	0	0											0							0	0
3	5	62	56	21	92	20	62	10	36	9	40	0	0	0											0							0	0
3	19	62	92	21	56	13	62	9	50	4	53	0	0	2											0							0	0
4	2	62	47	23	36	9	56	7	89	6	55	20	0	0											0							0	0
4	16	62	36	13	56	8	92	7	86	6	66	50	0	0											0							0	0
5	7	62	82	27	92	11	56	10	86	6	46	60	0	5											0							0	1
5	21	62	56	29	89	19	82	15	57	24	13	210	100	317	11	6	17	5	22	3	46	2	2	1	66	50	4	76	4			0	0
6	4	62	92	31	56	27	89	17	61	13	12	40	0	12	17	1									31	76	3	50	1			0	0
6	18	62	45	38	56	25	92	24	58	6	7	0	10	114	11	5	17	2	22	1					19	50	2	76	2	52	1	0	1
7	2	62	45	42	56	16	92	15	89	6	21	40	50	571	11	7	2	5	17	5	22	2	46	1	116	76	5	50	3	53	3	0	0
7	16	62	56	46	89	16	58	6	82	6	26	0	40	45	11	3	2	1							21	50	2	76	2	53	1	0	0
8	6	62	56	48	57	17	26	16	58	10	9	0	0	102											0							1	0
8	20	62	58	36	56	29	89	7	27	7	21	0	0	351	22	6	17	2	21	2	46	1			59	50	5	77	1			0	1
9	4	62	56	22	58	13	26	10	82	9	46	0	0	77	22	3	17	3	15	2	11	1			90	51	5	50	4	77	3	0	0
9	17	62	26	44	56	24	82	9	47	2	21	0	0	113	21	4	2	2	22	2	16	2	11	1	60	50	4	51	4	52	1	0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE INDIANA
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
EVANSVILLE, INDIANA 36

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES					CHLOROFORM EXTRACTABLES								
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
1	11	62	1	20	5040	128	42	86	1	9	21	4	3	12	2	4	2	0	5
2	1	62	2	9	5030	146	46	100	1	11	21	4	3	13	1	5	3	1	4
3	1	62	3	15	5368	121	44	77	0	9	20	4	3	13	0	5	2	1	7
4	2	62	4	11	5419	126	48	78	2	11	18	4	2	10	2	6	3	1	7
5	3	62	5	11	5009	172	82	90	3	18	26	3	3	19	1	10	9	1	15
6	4	62	8	6	3608	190	68	122	0	12	31	5	4	22	0	9	3	1	12
8	6	62	8	16	5091	178	88	90	3	22	29	1	2	23	3	13	9	3	9
9	11	62	9	20	5426	170	78	92	1	13	32	2	2	26	2	10	7	1	14

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	INDIANA
MAJOR BASIN	OHIO RIVER
MINOR BASIN	OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION	OHIO RIVER AT EVANSVILLE, INDIANA 36

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	21.5	-	8.5	-	-	-	-	-	27	110	160	-	11	130	.0	-	300
10	9	61	22.8	-	8.7	-	-	-	-	-	30	86	171	5	11	93	.0	-	200
10	16	61	21.6	-	8.4	-	-	-	-	-	24	93	171	-	10	88	.0	-	2000
10	23	61	21.5	-	7.8	-	-	-	-	-	37	97	185	-	11	118	.0	-	5000
10	30	61	20.0	-	7.7	-	-	-	-	-	44	89	200	-	10	130	.1	-	2800
11	6	61	16.4	8.0	7.6	2.7	6	-	-	-	59	86	200	-	12	130	.1	-	2800
11	13	61	19.5	10.0	7.4	-	24	4.6	-	.4	64	73	148	-	10	98	.1	-	1100
11	20	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8400
11	22	61	17.0	10.2	7.5	-	25	-	-	.4	68	74	154	-	21	98	.2	-	-
11	27	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2900
11	29	61	16.7	9.0	7.4	4.8	22	.8	.0	.8	52	59	180	-	79	130	.2	-	-
12	6	61	16.7	10.2	7.2	2.8	25	-	-	.8	38	49	161	-	34	113	.2	-	-
12	12	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14000
12	13	61	14.0	10.8	7.2	7.3	26	7.8	-	.6	31	61	147	15	81	90	.2	-	-
12	18	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	700
12	20	61	9.5	10.3	6.8	-	7	6.2	-	.2	34	47	125	15	148	70	.4	-	-
12	27	61	7.5	-	6.8	-	-	-	-	-	18	35	116	-	320	42	.3	-	-
1	3	62	5.1	-	7.2	-	-	-	-	-	19	47	146	-	130	57	.2	-	-
1	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2100
1	9	62	6.0	12.8	7.3	-	18	1.2	-	.6	21	37	115	-	153	-	-	-	-
1	10	62	6.8	12.0	7.4	6.2	27	1.6	-	.6	19	64	125	20	125	65	.2	-	-
1	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7200
1	17	62	6.0	11.6	7.2	-	34	-	-	.8	19	52	134	30	360	60	.2	-	-
1	22	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9000
1	24	62	12.0	12.7	7.3	5.8	35	1.4	3.0	.5	19	57	134	25	250	71	.3	-	-
1	29	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9600
1	31	62	9.0	10.7	7.1	5.0	36	1.6	2.8	.6	19	55	118	25	330	78	.4	-	-
2	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5500
2	7	62	7.0	11.4	7.2	5.9	24	1.1	2.7	.4	22	62	145	30	250	57	.6	-	-
2	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6300
2	15	62	7.0	11.8	7.3	6.4	31	1.4	-	.7	18	63	142	15	120	57	.3	-	-
2	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1900
2	21	62	8.0	11.4	7.2	6.5	26	1.2	2.5	1.2	19	64	145	20	120	73	.3	-	-
2	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3700
2	28	62	5.0	10.7	7.2	6.3	17	1.4	2.0	.4	17	69	129	40	600	59	-	-	-
3	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3300
3	7	62	9.0	10.5	7.2	6.0	-	1.1	-	-	10	48	77	40	370	35	-	-	-
3	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1500
3	14	62	8.0	11.3	7.2	3.3	-	.9	-	.5	11	70	122	20	120	51	-	-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE INDIANA

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION OHIO RIVER AT
EVANSVILLE, INDIANA 36

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
3	15	62	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
3	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5700
3	21	62	9.0	10.7	7.2	4.2	-	.9	-	.3	14	55	120	20	120	59	-	-	-
3	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14000
3	29	62	13.0	9.7	7.2	6.2	-	1.1	-	.2	13	56	108	30	170	59	.2	-	-
4	4	62	12.0	10.2	7.3	3.7	-	1.9	-	.2	11	57	123	30	150	78	-	-	-
4	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300
4	11	62	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
4	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	50	-	-	850
4	18	62	12.0	9.1	7.2	3.8	-	1.5	-	.2	10	44	117	15	115	68	-	-	-
4	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	55	-	-	700
4	25	62	12.0	9.8	7.2	3.6	-	1.9	-	.3	12	47	117	20	125	55	-	-	-
4	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3500
5	3	62	17.0	8.3	7.3	4.1	-	1.9	-	.5	14	60	138	30	71	82	-	-	-
5	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3500
5	11	62	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-
5	14	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2500
5	16	62	23.0	8.4	7.3	4.0	-	2.0	-	.4	20	75	142	35	25	90	.1	-	-
5	21	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200
5	23	62	24.0	10.2	8.0	3.7	-	1.0	-	.4	21	85	164	15	39	95	.2	-	-
5	28	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*330
6	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	92	-	-	7700
6	6	62	24.0	8.6	7.5	3.5	-	1.2	-	.4	25	82	163	-	34	98	.5	-	-
6	11	62	-	-	7.6	-	-	-	-	-	-	86	152	5	*25	75	.0	250	20000
6	13	62	24.0	7.3	7.5	-	-	-	-	.3	25	80	150	20	120	113	.4	-	-
6	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	68	-	-	-
6	21	62	25.0	8.6	7.5	-	-	1.5	-	.1	26	92	163	20	20	113	.8	-	-
6	25	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3100
7	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
7	19	62	27.0	5.5	7.5	-	-	-	-	-	33	57	138	15	62	95	.2	-	-
8	1	62	26.0	7.7	7.5	1.0	-	1.9	-	-	16	78	123	-	57	98	.3	-	-
8	6	62	-	-	8.0	-	-	-	-	-	14	80	124	5	85	63	.0	-	-
8	9	62	27.0	8.6	7.7	2.0	24	-	-	.2	22	79	136	-	20	98	.3	-	-
8	15	62	25.0	11.3	8.6	2.2	27	.3	-	.1	30	76	150	-	18	98	.1	-	-
8	20	62	-	-	-	-	-	-	-	-	29	80	148	5	25	67	-	-	-
8	23	62	26.0	10.2	8.6	2.1	27	.8	-	.2	33	76	150	-	20	105	.3	-	-
8	29	62	26.0	4.9	9.5	1.8	27	-	-	.1	33	72	150	-	17	98	.4	-	-
9	6	62	26.0	10.3	7.5	-	-	-	-	-	31	73	147	-	20	95	.5	-	-
9	12	62	24.0	8.1	7.6	-	-	-	-	-	40	73	148	-	22	98	.5	-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE INDIANA
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
EVANSVILLE, INDIANA 36

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
9	17	62	-	-	-	-	-	-	-	-	33	60	152	5	25	102	-	-	-
9	19	62	23.0	-	-	-	-	-	-	-	41	62	150	-	13	-	-	-	-
9	26	62	20.0	10.4	7.8	2.2	27	.2	-	.8	42	68	147	-	11	105	.1	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Evansville, Indiana
Operated by U.S. Geological Survey

STATE	Indiana
MAJOR BASIN	Ohio River
MINOR BASIN	Ohio River-Main Stem and Minor Trib.
STATION LOCATION	Ohio River at Evansville, Indiana

October	November	December	January	February	March	April	May	June	July	August	September

DATA NOT AVAILABLE AT PRESENT TIME

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER

(Parts per billion)

STATE KENTUCKY

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION OHIO RIVER AT

LOUISVILLE, KENTUCKY 84

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLOROFORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGENATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	3	61	10	18	2986	423	117	306	4	21	48	3	3	40	2	18	11	3	12
11	6	61	11	14	5320	287	106	181	1	14	48	2	2	39	5	12	7	3	21
12	5	61	12	13	5087	196	58	138	3	13	15	3	2	10	0	4	3	2	18
1	2	62	1	8	4250	134	42	92	2	10	19	4	2	13	0	4	2	0	5
2	6	62	2	16	4984	114	35	79	1	6	18	4	2	11	1	4	1	1	4
3	6	62	3	16	4709	147	68	79	3	15	21	2	2	16	1	8	8	1	12
4	3	62	4	16	3977	192	74	118	5	16	25	5	4	16	0	9	7	1	11
5	1	62	5	11	5083	169	76	93	3	19	24	3	2	18	1	8	8	1	13
6	5	62	6	19	3749	201	84	117	3	22	26	3	2	19	2	9	8	2	14
7	3	62	7	16	5073	243	135	108	5	31	40	2	2	32	4	16	14	3	26
8	7	62	8	15	5216	248	114	134	3	30	30	2	1	25	2	14	15	2	20
9	4	62	9	14	5081	280	107	173	2	23	35	2	1	29	3	12	12	4	19

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	KENTUCKY
MAJOR BASIN	OHIO RIVER
MINOR BASIN	OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION	OHIO RIVER AT LOUISVILLE, KENTUCKY 84

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	3	61	10	11	–	–	–	–	–	–	4	4	10	6	14	7						
10	10	61	10	30	0	0	2	2	2	2	1	4	13	6	14	7						
10	17	61	10	26	0	1	0	1	0	1	0	8	9	10	9	13						
10	24	61	11	1	1	1	0	2	1	2	9	9	19	12	28	15						
10	31	61	11	7	0	1	0	1	0	1	8	8	14	10	22	13						
11	6	61	11	15	0	1	0	2	0	2	22	9	4	10	26	13						
11	14	61	11	24	1	1	1	1	2	1	0	5	13	8	13	9						
11	21	61	11	30	0	0	0	1	0	1	4	4	23	6	27	7						
11	28	61	12	6	1	2	0	2	1	3	77	13	31	14	108	19						
12	5	61	12	11	0	0	0	1	0	1	8	6	22	7	30	9						
12	12	61	12	18	0	1	0	1	0	1	15	5	14	6	29	8						
12	18	61	12	26	1	1	0	1	1	1	25	6	23	5	48	8						
12	26	61	1	3	4	2	0	1	4	2	24	7	11	5	35	9						
1	2	62	1	11	0	1	0	1	0	1	6	4	9	5	15	6						
1	8	62	1	19	1	1	0	1	1	1	23	5	21	6	44	8						
1	16	62	1	24	1	1	0	1	1	1	49	8	27	7	76	11						
1	23	62	1	30	2	2	0	1	2	2	83	8	29	6	112	10						
1	30	62	2	8	1	1	0	1	1	1	25	7	21	5	46	9						
2	6	62	2	14	1	1	1	1	2	1	21	6	12	6	33	8						
2	13	62	2	20	1	1	0	1	1	1	25	4	19	5	44	6						
2	20	62	3	1	1	1	0	1	1	1	26	5	17	5	43	7						
2	27	62	3	9	7	7	0	1	7	7	110	18	33	6	143	19						
3	6	62	3	16	4	3	0	1	4	3	65	9	19	5	84	10						
3	13	62	3	23	2	1	1	1	3	1	50	7	21	5	71	9						
3	20	62	3	30	4	2	0	1	4	2	37	7	16	5	53	9						
3	27	62	4	4	6	4	0	1	6	4	99	9	15	5	114	10						
4	3	62	4	16	1	1	0	0	1	1	100	9	21	5	121	10						
4	10	62	4	23	2	1	1	1	3	1	27	6	13	5	40	7						
4	17	62	4	30	6	3	0	2	6	4	66	9	18	5	84	10						
4	24	62	5	24	0	1	0	1	0	1	6	6	12	6	18	8						
5	1	62	6	14	0	0	0	0	0	0	71	6	97	8	168	10						
5	8	62	6	8	0	0	2	1	2	1	8	5	25	7	33	9						
5	15	62	7	19	0	1	0	1	0	1	14	10	15	8	29	13						
5	22	62	6	25	0	0	0	0	0	0	0	4	15	5	15	6						
5	29	62	6	29	1	1	0	1	1	1	8	5	23	7	31	9						
6	5	62	7	5	1	1	0	1	1	1	7	6	26	8	33	10						
6	12	62	7	10	1	1	0	0	1	1	8	6	19	8	27	10						
6	19	62	7	13	0	1	1	1	1	1	8	4	16	5	24	6						
6	26	62	7	23	0	1	0	1	0	1	1	4	18	6	19	7						
7	3	62	7	31	–	–	–	–	–	–	0	16	17	14	17	21						
7	10	62	8	6	–	–	–	–	–	–	8	7	14	9	22	11						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	KENTUCKY
MAJOR BASIN	OHIO RIVER
MINOR BASIN	OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION	OHIO RIVER AT LOUISVILLE, KENTUCKY 84

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMI-NATION		ALPHA						BETA						DATE OF DETERMI-NATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
7	17	62	8	20	2	2	0	1	2	2	39	4	32	4	71	6						
7	24	62	8	3	-	-	-	-	-	-	15	3	27	4	42	5						
7	31	62	8	21	-	-	-	-	-	-	18	11	34	13	52	17						
8	7	62	8	28	-	-	-	-	-	-	2	5	16	7	18	9						
8	14	62	8	31	-	-	-	-	-	-	7	6	14	8	21	10						
8	21	62	9	7	0	1	0	0	0	1	5	10	15	7	20	12						
8	28	62	9	27	-	-	-	-	-	-	7	11	14	7	21	13						
9	4	62	9	27	-	-	-	-	-	-	6	5	20	8	26	9						
9	11	62	10	12	-	-	-	-	-	-	5	6	29	10	34	12						
9	18	62	10	11	0	0	0	1	0	1	3	5	13	8	16	9						
9	25	62	10	18	-	-	-	-	-	-	2	6	11	8	13	10						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE KENTUCKY
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
LOUISVILLE, KENTUCKY 84

DATE OF SAMPLE			ALGAE (Number per milliliter)										MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS		INERT DIATOM SHELLS		1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	3	61	2600	220	290	1300	0	0	20	670	90	470	110	68	2	44	2	15	1	35	1	2	1	38	1	69	1	71	1				
10	17	61	1500	0	100	400	210	40	0	640	80	20	80	69	3	50	1																
11	6	61	3100	20	0	420	0	480	20	2010	150	100	40	69	4	68	2																
11	21	61	2400	0	40	330	0	270	0	1350	370	210	40	69	2	92	1																
12	5	61	3100	50	0	450	0	250	70	1530	720	430	680	69	4	38	2	92	2	51	1												
12	18	61	1800	0	0	20	20	0	0	950	810	120	330	69	3	68	1	92	1														
1	2	62	1200	0	0	0	0	230	0	380	560	20	70	92	1	68	1	69	1	51	1												
1	16	62	600	0	0	20	0	0	0	290	270	270	600	69	1																		
2	6	62	600	0	0	70	0	50	0	290	200	490	400	68	2																		
2	20	62	600	0	0	40	0	100	80	190	230	0	20																				
3	6	62	800	0	20	0	0	0	0	170	640	20	100	92	2																		
3	20	62	700	0	0	20	0	60	0	150	480	0	170	92	1																		
4	3	62	800	0	0	0	0	0	0	80	730	0	170	92	1	82	1																
4	17	62	400	0	0	20	0	0	0	110	310	110	450																				
5	1	62	1600	0	0	170	0	130	20	850	460	1430	100	71	2	68	1	92	1	69	1												
5	15	62	3000	0	150	1010	40	490	0	870	490	610	210	24	2	71	2	57	2	38	1	69	1	92	1								
6	5	62	5200	0	210	1480	250	0	0	2320	930	2070	930	92	6	68	3	24	3	71	3	69	2	50	1	40	1	17	1				
6	19	62	20000	80	0	620	120	910	170	15820	2320	7580	540	68	6	69	6	92	4	71	4	51	3	38	1	31	1						
7	3	62	700	0	0	40	0	0	0	80	560	40	120	92	1																		
7	17	62	7400	60	0	500	0	0	40	5220	1620	1740	540	68	5	92	4	88	1	39	1	71	1										
8	7	62	1900	0	110	110	700	0	0	720	250	420	250	50	3	69	3																
8	21	62	1800	40	0	20	0	110	0	1140	510	460	40	69	3	92	2	68	1														
9	4	62	600	150	0	40	0	0	0	300	80	0	80	69	1																		
9	18	62	300	0	0	0	0	0	60	210	40	0	0																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

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STATE KENTUCKY
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
LOUISVILLE, KENTUCKY 084

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH					NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	3	61	56	40	26	30	82	11	58	4	15	20	0	203	11	5	17	3							112	50	5	76	4	54	3	0	0
10	17	61	56	76	89	6	26	6	92	4	8	0	0	344	11	5	22	5	15	3	18	1			39	51	4	53	3			2	0
11	6	61	56	57	26	12	89	11	58	11	9	0	0	139	11	5	2	1	17	1	18	1			1							0	0
11	21	61	56	86	69	8	57	3	92	3	10	0	0	68	11	4									4	51	1					0	0
12	5	61	56	80	89	3	57	3	58	3	11	230	0	0											0							0	0
12	18	61	56	52	89	10	62	6	58	4	28	0	0	7	15	1									1							5	0
1	2	62	56	21	92	13	62	9	26	6	51	50	0	0											0							0	0
1	16	62	56	34	26	9	89	7	36	6	44	70	0	0											0							0	0
2	6	62	26	25	92	25	36	11	56	9	30	0	0	0											0							0	0
2	20	62	92	15	36	13	93	12	51	11	49	20	0	1											0							0	0
3	6	62	92	25	62	10	26	8	56	6	51	20	0	0											0							0	0
3	20	62	92	10	26	9	62	7	65	7	67	40	0	1											0							0	0
4	3	62	92	19	56	18	36	12	86	9	42	0	0	0											0							0	0
4	17	62	92	25	56	22	86	9	58	4	40	20	0	0											0							0	0
5	1	62	82	31	92	14	26	8	56	5	42	0	0	0											0							0	0
5	15	62	82	38	56	11	57	9	92	7	35	0	10	152	11	5	2	2	21	1	17	1			12	51	1	50	1	76	1	2	0
6	5	62	92	14	56	14	89	7	45	6	59	0	10	302	17	5	11	5	15	3	22	3			8	76	2					2	1
6	19	62	56	50	45	21	92	15	26	8	6	120	0	680	11	7	22	5	17	5	15	4	2	3	23	50	3	76	1			1	0
7	3	62	57	37	56	23	92	15	26	8	17	0	0	167	17	4	11	4	2	2	15	1	22	1	11	50	3					0	0
7	17	62	56	40	26	35	58	9	92	5	11	0	0	8	15	1									0							0	0
8	7	62	56	58	26	22	58	7	57	3	10	0	0	78	22	4									2							0	0
8	21	62	56	87	58	8	89	2	27	2	1	0	0	187	22	5	17	1	11	1					9	50	2					0	0
9	4	62	56	44	82	16	68	4	89	4	32	0	0	0											18	51	3	50	1			3	0
9	18	62	56	34	58	12	26	11	68	7	64	0	0	135	17	4	22	3	11	3					27	51	4	50	1			3	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE KENTUCKY
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
LOUISVILLE, KENTUCKY 84

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	21.5	5.4	7.6	-	-	2.5	3.7	-	44	96	164	0	5	113	.1	293	820
10	10	61	20.0	7.2	7.8	-	-	1.6	5.5	-	42	94	180	0	6	124	.1	339	*100
10	17	61	19.0	6.0	7.5	-	16	1.6	4.7	-	51	98	182	0	10	130	.1	306	150
10	24	61	18.0	4.1	7.2	-	-	1.3	3.2	-	62	94	194	0	8	130	.1	402	-
10	31	61	16.0	5.4	7.1	-	-	1.3	3.6	-	73	71	192	0	11	148	.1	395	*100
11	6	61	15.0	6.2	7.2	-	-	1.5	5.6	-	69	66	194	0	8	170	.1	352	-
11	14	61	15.0	8.3	7.2	-	-	.9	5.7	-	40	78	130	0	5	93	.1	217	530
11	21	61	11.0	7.6	7.2	-	-	4.4	4.9	-	48	69	150	0	8	124	.1	284	2600
11	28	61	10.0	8.0	7.1	-	-	4.3	4.9	-	59	74	192	0	40	148	.1	387	550
12	5	61	8.5	8.0	6.9	-	-	1.9	6.8	-	33	58	118	0	20	105	.5	233	440
12	12	61	6.8	9.8	7.3	-	12	2.0	5.8	-	26	100	134	0	45	86	.3	207	4400
12	19	61	6.8	9.2	7.2	-	-	2.0	5.8	-	27	75	104	0	160	68	.1	176	12000
12	26	61	5.5	7.8	7.1	-	-	1.0	5.8	-	20	65	82	0	160	51	.1	185	3000
1	2	62	2.7	8.0	7.3	-	-	.2	4.8	-	25	70	104	0	60	63	.1	199	5200
1	8	62	-	-	-	-	25	-	-	-	-	-	-	-	-	-	-	-	-
1	9	62	2.2	10.6	7.5	-	-	2.4	3.9	-	22	97	124	0	65	70	.1	196	160
1	16	62	1.1	8.9	7.3	-	-	3.4	3.9	-	34	77	110	0	160	75	.1	208	3800
1	23	62	1.6	5.7	7.5	-	-	3.2	7.6	-	17	86	110	0	550	59	.1	185	6000
1	30	62	4.4	5.6	7.3	-	-	3.9	7.7	-	15	67	88	0	350	32	.1	136	3200
2	6	62	3.9	7.2	7.2	-	-	2.6	3.8	-	20	72	100	0	85	-	.1	183	840
2	13	62	3.3	8.9	7.3	-	9	.5	1.8	-	20	74	102	0	100	56	.1	-	2200
2	20	62	3.3	9.2	7.3	-	-	2.5	3.8	-	17	73	94	0	65	-	.1	123	2500
2	27	62	6.1	8.3	7.3	-	-	4.3	5.8	-	16	76	104	0	800	46	.1	188	5200
3	6	62	5.5	4.7	7.1	-	-	2.4	3.8	-	10	50	66	0	440	-	.2	138	2200
3	13	62	5.0	8.9	7.4	-	-	1.6	1.9	-	15	75	104	0	160	59	.2	185	1400
3	20	62	7.2	8.6	7.2	-	-	2.4	4.7	-	23	64	106	0	90	78	.2	204	1700
3	27	62	8.3	7.2	7.2	-	-	.4	4.8	-	13	53	96	0	250	48	.1	137	3100
4	3	62	14.0	7.6	7.3	-	42	1.6	2.8	-	12	66	98	0	250	37	.3	140	7500
4	10	62	18.0	7.4	7.3	-	8	1.5	2.8	-	15	59	98	0	100	59	.3	198	600
4	17	62	18.0	5.4	7.1	2.6	44	1.6	2.9	-	12	47	74	0	190	57	.1	146	1600
4	24	62	11.1	7.4	7.1	.8	25	1.4	3.9	-	16	49	98	0	75	73	.1	-	1600
5	1	62	16.1	7.0	7.0	1.2	25	1.2	2.9	-	18	60	108	0	8	86	.1	231	1000
5	8	62	18.3	5.4	7.2	1.6	20	1.6	3.8	-	21	70	120	0	6	95	.1	247	1500
5	15	62	21.1	5.6	7.2	-	-	1.7	2.9	-	23	79	136	0	10	90	.1	-	800
5	22	62	25.0	-	7.5	-	-	1.6	2.9	-	24	83	138	0	5	95	.1	278	*40
5	29	62	24.4	-	7.2	-	-	2.6	3.9	-	29	87	152	0	18	101	.1	292	31000
6	5	62	25.0	-	7.2	-	23	1.7	3.8	-	30	92	148	0	15	76	.2	261	1700
6	12	62	26.1	-	7.4	-	34	.7	2.8	-	-	98	144	0	20	-	.2	273	2000
6	19	62	25.5	-	7.3	-	30	1.6	2.9	-	-	84	144	0	6	-	.2	282	440

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE KENTUCKY
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
LOUISVILLE, KENTUCKY 84

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	26	62	27.2	-	7.2	-	24	1.5	2.8	-	-	78	158	0	5	-	.1	304	200
7	3	62	28.4	-	7.1	-	20	2.6	3.8	-	34	78	160	0	6	100	.6	307	40
7	10	62	28.9	-	7.2	1.0	22	.6	2.8	-	-	72	132	0	9	-	.1	228	200
7	17	62	27.2	-	7.2	.4	25	1.7	3.9	-	-	77	120	0	150	78	.4	205	3900
7	24	62	26.6	-	7.3	.6	26	.7	3.9	-	-	85	120	0	75	-	.3	206	1500
7	31	62	26.6	-	7.1	2.0	24	.1	3.5	-	43	94	144	0	35	70	.1	268	300
8	7	62	27.7	-	7.2	1.0	20	3.4	3.9	-	-	73	138	0	12	90	.1	266	200
8	14	62	27.2	-	7.1	1.2	23	1.5	2.9	-	-	53	132	0	7	101	.1	283	200
8	21	62	27.7	-	7.1	1.5	24	3.5	3.9	-	-	59	124	0	7	98	.1	233	300
8	28	62	26.6	-	7.1	2.9	25	4.6	4.9	-	41	56	142	0	6	110	.3	253	3200
9	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
9	4	62	26.6	-	7.0	.8	21	.1	3.8	-	-	52	136	0	6	-	.1	281	-
9	11	62	24.4	-	6.9	.8	21	.6	1.9	-	42	54	130	0	6	95	.1	270	5000
9	18	62	24.4	-	6.9	-	34	.6	1.9	-	55	49	144	0	5	110	.1	332	*200
9	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
9	25	62	22.2	-	7.0	.2	10	.7	1.9	-	53	51	148	0	6	113	.1	319	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Louisville, Kentucky
Operated by U.S. Geological Survey

STATE	Kentucky
MAJOR BASIN	Ohio River
MINOR BASIN	Ohio River-Main Stem and Minor Trib.
STATION LOCATION	Ohio River at Louisville, Kentucky

October	November	December	January	February	March	April	May	June	July	August	September

DATA NOT AVAILABLE AT PRESENT TIME

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE OHIO

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION OHIO RIVER AT
CINCINNATI, OHIO 37

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	18	61	10	31	3302	461	212	249	9	45	79	6	5	59	9	21	32	4	22
11	8	61	11	20	2176	688	262	426	3	44	110	12	11	79	8	34	16	3	52
12	20	61	12	21	3588	261	97	164	1	19	45	10	6	28	1	11	7	2	12
1	17	62	1	31	4466	245	112	133	2	22	47	6	7	32	2	10	4	2	25
2	14	62	2	28	4593	207	67	140	1	11	34	4	5	23	2	10	3	1	7
3	14	62	3	28	3613	276	104	172	4	22	43	6	6	30	1	13	9	2	11
4	11	62	4	25	4330	195	76	119	5	16	31	6	4	20	1	10	7	1	6
5	9	62	5	21	4315	215	107	108	3	25	41	4	3	32	2	15	8	2	13
6	13	62	6	27	4354	243	139	104	0	33	46	2	5	35	4	19	17	3	21
7	18	62	7	30	4191	194	77	117	1	17	31	5	3	23	0	12	5	2	9
8	15	62	8	24	5401	181	75	106	2	17	32	2	1	26	3	8	5	2	9
9	5	62	9	19	4500	241	112	129	2	30	45	2	2	38	3	12	9	2	12

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	OHIO
MAJOR BASIN	OHIO RIVER
MINOR BASIN	OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION	OHIO RIVER AT CINCINNATI, OHIO

37

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMI-NATION		ALPHA						BETA						DATE OF DETERMI-NATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	4	61	10	14	0	1	0	2	0	2	8	9	4	11	12	14						
10	25	61	11	2	-	-	-	-	-	-	12	12	3	14	15	18						
11	1	61	11	9	-	-	-	-	-	-	11	10	25	13	36	16						
11	8	61	11	16	0	0	1	1	1	1	10	4	20	6	30	7						
11	15	61	11	22	-	-	-	-	-	-	12	8	21	10	33	13						
11	22	61	12	1	-	-	-	-	-	-	4	11	15	14	19	18						
11	29	61	12	6	-	-	-	-	-	-	82	11	16	7	98	13						
12	6	61	12	12	1	1	0	1	1	1	15	6	21	8	36	10						
12	13	61	12	19	-	-	-	-	-	-	23	6	20	6	43	8						
12	20	61	12	29	-	-	-	-	-	-	8	7	4	6	12	9						
12	27	61	1	5	-	-	-	-	-	-	29	8	15	7	44	11						
1	3	62	1	11	1	1	0	1	1	1	19	5	13	5	32	7						
1	10	62	1	17	-	-	-	-	-	-	17	7	15	7	32	10						
1	16	62	1	24	-	-	-	-	-	-	32	7	24	7	56	10						
1	24	62	1	31	-	-	-	-	-	-	38	9	19	7	57	11						
1	31	62	2	9	-	-	-	-	-	-	190	10	26	7	216	12						
2	7	62	2	14	1	1	0	1	1	1	41	7	17	5	58	9						
2	14	62	2	21	-	-	-	-	-	-	17	6	14	7	31	9						
2	21	62	3	2	-	-	-	-	-	-	4	6	3	7	7	9						
2	28	62	3	12	-	-	-	-	-	-	118	21	28	7	146	22						
3	7	62	3	16	0	1	0	0	0	1	56	8	27	5	83	9						
3	14	62	3	26	-	-	-	-	-	-	33	9	8	7	41	11						
3	21	62	3	30	-	-	-	-	-	-	73	13	22	5	95	14						
3	28	62	4	5	-	-	-	-	-	-	45	8	18	7	63	11						
4	4	62	4	13	3	2	0	1	3	2	77	8	16	5	93	9						
4	11	62	4	24	-	-	-	-	-	-	41	13	21	6	62	14						
4	18	62	4	30	-	-	-	-	-	-	45	8	15	6	60	10						
4	25	62	6	14	-	-	-	-	-	-	20	9	18	9	38	13						
5	2	62	6	4	-	-	-	-	-	-	5	7	19	9	24	11						
5	9	62	6	12	2	1	0	1	2	1	23	7	12	7	35	10						
5	16	62	6	25	-	-	-	-	-	-	3	6	17	9	20	11						
5	23	62	6	26	-	-	-	-	-	-	12	6	17	8	29	10						
5	28	62	6	27	-	-	-	-	-	-	102	21	24	8	126	22						
6	6	62	7	5	0	1	0	1	0	1	2	7	28	10	30	12						
6	13	62	7	16	-	-	-	-	-	-	9	6	11	8	20	10						
6	20	62	7	17	-	-	-	-	-	-	4	5	15	6	19	7						
6	27	62	7	24	-	-	-	-	-	-	14	5	8	8	22	9						
7	2	62	7	31	0	1	0	1	0	1	7	14	11	21	18	25						
7	18	62	8	8	-	-	-	-	-	-	10	6	17	7	27	9						
7	25	62	9	20	-	-	-	-	-	-	0	3	8	4	8	5						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE OHIO

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION OHIO RIVER AT

CINCINNATI, OHIO 37

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO	DAY	YR	MO	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO	DAY	µµc/g	±	µµc/g	±
8	1	62	9	19	-	-	-	-	-	-	9	6	22	8	31	10						
8	8	62	8	28	0	1	0	2	0	1	0	5	25	8	25	9						
8	15	62	8	29	-	-	-	-	-	-	0	7	13	7	13	10						
8	22	62	9	5	-	-	-	-	-	-	0	7	14	7	14	10						
8	29	62	9	27	-	-	-	-	-	-	0	6	19	10	19	12						
9	5	62	9	17	0	1	0	1	0	1	3	5	19	8	22	9						
9	11	62	10	2	-	-	-	-	-	-	2	10	8	13	10	16						
9	19	62	10	15	0	1	0	1	0	1	32	11	24	14	56	18						
9	26	62	10	16	-	-	-	-	-	-	4	11	13	16	17	19						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
CINCINNATI, OHIO 37

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE		CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	1300	70	20	780	0	20	160	200	90		90	180	44	1	60	1	69	1														
10	18	61	1900	60	80	540	20	250	830	640	190		40	120	68	2	69	1	38	1	57	1												
11	8	61	3500	20	20	1080	0	100	20	1740	540		680	600	60	4	35	2	92	2	68	1	31	1	38	1								
11	22	61	3400	20	190	1020	0	230	0	1080	850		150	170	69	3	92	2	38	2	68	1	24	1	16	1								
12	6	61	1000	0	0	150	0	40	0	500	270		40	80	69	2																		
12	20	61	800	0	0	20	0	0	0	400	360		200	1320	69	2	92	1																
1	3	62	600	0	0	0	0	0	0	110	470		0	110	82	1																		
1	17	62	400	0	0	20	0	0	0	70	270		90	310																				
2	7	62	500	0	0	20	0	20	0	190	290		0	20																				
2	21	62	300	0	0	20	0	0	0	40	210		0	0																				
3	7	62	2000	60	0	0	0	20	40	370	1470		20	190	68	1	88	1	92	1	87	1												
3	21	62	200	20	0	0	0	0	0	20	160		20	360																				
4	4	62	1000	0	20	20	0	20	20	190	700		20	150	69	1	84	1	92	1														
4	18	62	800	0	0	20	20	40	0	270	410		20	100	92	1																		
5	9	62	2000	20	150	400	0	130	20	550	780		930	380	71	2	92	1	77	1														
5	23	62	33000	130	6200	17010	890	250	130	5660	2740		1980	1220	24	7	16	6	71	5	92	4	40	4	69	4	38	3	50	3	68	3	30	2
6	6	62	36600	40	6250	2150	*	380	40	17940	2280		10850	800	71	7	50	6	16	6	92	4	69	4	17	2	38	2	40	2	31	2	68	1
6	20	62	36800	0	300	3120	0	720	0	28950	3670		16920	2570	69	7	68	7	92	5	38	3	40	3	57	3	24	2	17	1	32	1	35	1
7	2	62	8600	80	40	1480	0	130	0	4940	1900		2790	590	69	5	92	4	71	3	68	3	40	1	88	1	32	1	39	1	44	1		
7	18	62	2000	0	0	360	0	0	0	1100	510		1600	460	68	3	92	2	69	1														
8	8	62	1800	110	0	130	0	0	0	760	800		170	80	92	1	69	1																
8	22	62	300	0	0	0	0	210	40	30	0		0	0	51	1																		
9	5	62	600	0	0	60	0	0	0	420	80		0	40	69	1	68	1																
9	19	62	00	0	0	10	0	0	0	0	0		70	10																				
9	29	62	100	0	0	10	0	0	0	10	60		30	70																				
*6	6	62					7510																											

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
CINCINNATI, OHIO 037

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	4	61	89	47	56	30	92	6	53	4	15	0	0	110	22	4	11	3	21	1					135	50	5	76	4	53	4	0	0
10	18	61	56	69	89	23	58	3	26	2	3	0	0	243	11	5	17	4	22	2					114	50	5	52	4	76	3	1	0
11	8	61	56	67	58	16	89	9	57	3	5	0	20	55	11	2	46	1							2							2	0
11	22	61	56	81	89	10	58	2	26	2	5	0	10	329	11	6	17	2	2	1					3							0	0
12	6	61	64	15	26	14	65	11	36	11	49	0	0	5											3							0	0
12	20	61	56	49	92	15	62	10	47	8	18	20	0	0											1							0	0
1	3	62	56	19	92	10	62	10	88	10	51	140	0	2											2							0	0
1	17	62	56	30	92	14	26	7	2	5	44	50	0	0											0							1	0
2	7	62	26	22	36	13	92	13	74	6	46	20	0	1											0							1	0
2	21	62										40	0	0											0							2	0
3	7	62	26	17	62	8	92	8	71	6	61	100	0	0											0							0	0
3	21	62	92	20	62	11	26	8	36	7	54	110	0	0											0							0	0
4	4	62	56	13	47	13	92	12	62	9	53	40	0	0											1							0	0
4	18	62	92	18	56	8	36	7	89	6	61	20	0	0											0							0	0
5	9	62	92	28	89	12	9	11	82	10	39	20	10	78	2	4	11	2	21	1					3							1	0
5	23	62	92	45	56	33	58	5	82	5	12	40	20	106	2	4	11	3	17	1	3	1			93	50	5	76	3	51	2	0	0
6	6	62	56	38	82	35	92	9	58	8	10	300	0	463	22	5	17	4	2	4	11	1			114	50	5	76	3			0	0
6	20	62	56	31	57	24	26	21	92	18	6	0	10	936	22	7	11	6	17	5	2	4	15	1	47	76	4	50	3	51	2	0	0
7	2	62	58	37	56	25	92	20	57	9	9	0	0	174	17	4	11	3	9	3	21	3	22	2	22	76	3	53	2	50	1	1	0
7	18	62	56	49	92	21	26	12	58	9	9	0	0	43	11	2	17	1	22	1					43	50	4	76	2			0	2
8	8	62	56	36	26	33	58	9	57	1	21	0	0	6											12	50	2	51	1	53	1	0	2
8	22	62	10	43	56	11	26	7	46	7	32	0	0	8											27	50	3	76	2	51	1	0	0
9	5	62	10	25	56	23	26	12	89	3	37	0	0	1											40	50	4	53	2	51	1	0	0
9	19	62	94	18	10	16	26	12	56	7	47	0	0	0											39	77	3	50	2	51	2	0	0
9	29	62	10	38	56	9	26	8	68	6	39	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE OHIO

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION OHIO RIVER AT

CINCINNATI, OHIO 37

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	4	61	20.4	8.3	7.7	.8	8	3.3	5.8	.2	49	54	167	6	3	120	.0	282	2200
10	11	61	21.1	8.6	7.6	1.3	16	3.5	5.7	.3	45	50	174	7	2	140	.0	379	-
10	18	61	18.7	8.5	7.5	1.6	10	2.8	5.7	.2	63	52	183	7	2	152	.0	366	550
10	25	61	17.8	7.0	7.1	3.8	26	.5	11.8	.7	62	40	192	6	60	144	.0	399	5500
11	1	61	16.5	8.9	7.3	1.3	14	.8	18.0	1.7	81	52	164	7	7	130	.0	368	2200
11	8	61	13.7	9.6	7.3	.9	10	1.0	6.2	.3	40	36	138	10	9	120	.0	259	700
11	15	61	13.4	10.2	7.1	1.2	12	.7	6.9	.4	51	36	154	10	9	175	.0	331	780
11	22	61	11.7	9.7	7.1	3.1	-	1.1	9.6	.3	55	33	165	7	10	192	.0	350	33
11	29	61	9.0	8.2	7.2	3.7	48	1.4	10.9	.6	35	38	121	7	240	132	.0	233	6700
12	6	61	7.8	11.6	7.3	.7	12	.6	6.7	.4	28	36	128	5	15	120	.0	235	3600
12	13	61	6.0	11.0	7.2	1.4	17	.7	7.9	.4	36	36	114	4	60	100	.0	205	4500
12	20	61	5.8	11.2	7.2	2.2	39	.9	9.3	.3	24	30	88	5	150	80	.0	271	3000
12	27	61	4.9	12.1	7.0	1.2	37	.8	7.7	.3	18	26	95	4	85	74	.0	180	10000
1	3	62	1.9	8.3	7.0	1.1	27	.6	5.6	.3	21	34	92	3	45	70	.0	172	1000
1	10	62	1.9	9.2	6.8	3.4	42	.5	9.5	.4	24	39	109	8	140	94	.0	194	13000
1	17	62	1.2	12.8	7.2	3.3	28	.5	6.4	.4	22	37	121	5	85	116	.0	216	4600
1	24	62	1.3	12.9	7.5	4.6	89	4.6	9.7	.6	26	38	93	9	260	78	.0	172	11000
1	31	62	3.8	12.9	7.3	2.7	43	.9	8.0	.8	22	38	98	5	160	75	.0	213	1800
2	7	62	2.2	13.0	7.2	2.3	36	.3	7.3	.4	21	33	89	5	110	68	.1	138	2300
2	14	62	2.4	13.2	7.2	2.6	53	.5	7.8	.4	19	30	89	3	110	55	.0	144	5500
2	21	62	3.8	11.9	7.2	4.3	35	.6	6.0	.2	23	31	96	6	45	84	.0	190	2200
2	28	62	5.5	10.7	7.3	3.5	63	1.0	9.2	.3	20	33	97	9	550	64	.0	172	35000
3	7	62	4.3	11.2	7.1	2.5	46	2.5	6.0	.2	11	28	81	7	200	-	.0	130	3200
3	14	62	5.1	11.0	7.2	2.9	46	2.3	5.8	.1	23	29	86	8	120	70	.1	172	12000
3	21	62	7.2	11.9	7.2	3.4	51	2.8	7.6	.2	19	38	105	6	220	-	.0	167	6000
3	28	62	7.8	10.4	7.3	2.6	85	2.5	6.0	.2	11	32	92	6	140	-	.0	149	5600
4	4	62	8.4	10.4	7.1	2.2	34	2.3	5.8	.1	9	24	82	10	160	59	.0	156	4000
4	11	62	10.1	9.0	7.0	2.2	36	2.0	5.6	.1	10	27	81	10	100	-	.0	128	2600
4	18	62	9.7	10.1	7.2	2.2	32	1.7	5.9	.3	7	23	72	7	110	60	.0	136	6100
4	25	62	12.2	9.3	7.0	1.9	27	2.0	4.0	.1	12	31	97	4	65	-	.0	174	830
5	2	62	16.0	8.5	7.3	1.4	22	2.5	4.8	.2	14	36	116	3	35	86	.0	218	610
5	9	62	19.0	7.9	7.1	2.1	22	1.0	6.0	.3	18	35	117	5	95	79	.1	221	1200
5	16	62	23.8	9.0	7.5	2.1	23	2.2	4.6	.1	20	41	130	2	6	99	.0	246	100
5	23	62	25.2	8.9	7.7	2.1	26	2.3	5.6	.1	25	42	140	4	35	126	.0	273	2000
5	28	62	24.0	5.7	7.2	4.6	39	.9	8.8	.3	25	56	134	6	270	90	.1	260	-
6	6	62	26.1	8.1	7.6	2.3	18	2.8	6.9	.1	36	51	141	12	15	77	.1	272	770
6	13	62	25.2	8.5	7.9	3.5	22	3.0	6.7	.2	-	50	137	15	10	-	.1	282	1500
6	20	62	26.9	8.1	7.3	2.8	24	.9	7.8	.2	46	41	152	10	25	116	.0	309	*170
6	27	62	27.2	7.3	7.1	1.7	21	.8	6.6	.2	39	39	154	10	15	104	.0	334	590

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	OHIO
MAJOR BASIN	OHIO RIVER
MINOR BASIN	OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION	OHIO RIVER AT CINCINNATI, OHIO 37

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	2	62	28.4	8.1	7.3	1.9	22	2.8	8.5	.2	-	30	144	6	7	144	.0	301	200
7	11	62	27.0	6.9	7.0	1.9	18	3.2	5.6	.2	25	34	122	9	40	-	.0	237	780
7	18	62	27.2	6.0	7.1	2.2	26	.9	7.9	.5	27	37	110	13	20	-	.1	234	950
7	25	62	27.0	6.7	7.1	.9	21	3.2	5.4	.2	29	35	115	10	25	85	.0	244	1000
8	1	62	26.2	7.0	7.0	1.1	17	.9	9.6	.7	33	38	123	9	15	-	.0	254	670
8	8	62	28.6	6.6	7.1	.8	46	2.9	5.2	.3	-	34	122	10	7	-	.1	279	2100
8	15	62	26.0	7.6	7.5	.9	18	3.0	5.4	.3	41	36	123	5	1	73	.0	307	930
8	22	62	27.2	7.0	7.0	1.4	20	1.6	8.8	.6	46	34	118	6	1	104	.0	303	540
8	29	62	27.8	6.7	7.1	1.2	19	3.9	6.6	.3	52	30	138	5	1	102	.0	327	540
9	5	62	26.9	6.1	7.2	1.0	20	.4	8.8	.6	49	37	144	10	2	104	.1	310	1400
9	12	62	23.4	6.1	7.1	1.2	25	1.6	9.0	.7	67	37	172	3	2	113	.0	385	2300
9	19	62	23.5	6.6	7.0	.7	21	1.2	7.5	.5	68	37	184	6	1	124	.1	386	890
9	26	62	20.7	7.6	7.2	1.2	22	2.7	4.6	.2	70	44	204	6	1	160	.0	438	2500

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Cincinnati, Ohio
Operated by U.S. Geological Survey

STATE	Ohio
MAJOR BASIN	Ohio River
MINOR BASIN	Ohio River-Main Stem & Minor Trib.
STATION LOCATION	Ohio River at Cincinnati, Ohio

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	13.800	20.000	90.500	80.500	192.000	551.000	233.000	66.400	42.500	14.800	31.000	10.500
2	17.800	27.600	53.400	58.700	167.000	588.000	261.000	77.800	42.200	16.600	29.700	12.900
3	15.800	38.100	47.200	40.000	142.000	578.000	271.000	77.600	33.300	18.800	23.100	27.600
4	14.700	29.300	39.800	45.000	110.000	536.000	259.000	79.700	21.200	45.600	15.100	17.300
5	15.200	30.000	37.100	52.700	116.000	472.000	240.000	77.000	31.400	48.400	15.000	9.620
6	14.100	28.900	37.900	72.900	106.000	414.000	210.000	73.400	39.700	49.500	16.200	15.400
7	13.300	28.800	40.400	101.000	115.000	357.000	194.000	70.200	41.200	38.000	20.900	10.800
8	26.800	26.000	45.200	145.000	116.000	294.000	212.000	57.300	39.700	37.900	18.700	10.700
9	12.400	33.800	47.200	204.000	116.000	250.000	252.000	49.600	33.200	37.500	30.000	11.700
10	6.810	27.300	63.100	219.000	118.000	228.000	259.000	48.900	32.900	30.700	17.400	14.300
11	9.670	18.900	78.200	214.000	111.000	221.000	255.000	45.900	26.300	28.500	15.100	11.900
12	15.300	15.900	87.500	187.000	124.000	221.000	251.000	43.500	38.800	19.200	15.000	8.440
13	10.100	20.300	101.000	146.000	120.000	222.000	267.000	43.500	34.600	14.500	17.700	8.380
14	17.200	28.000	118.000	113.000	105.000	242.000	302.000	45.600	46.500	15.400	11.800	9.500
15	17.700	25.400	137.000	90.700	94.700	264.000	322.000	40.100	53.700	41.500	13.900	12.800
16	9.030	26.000	131.000	68.900	90.700	283.000	313.000	37.900	61.600	53.700	15.000	8.380
17	11.900	41.700	120.000	73.400	85.000	280.000	285.000	39.700	55.300	49.200	14.000	10.600
18	12.000	50.500	118.000	87.200	80.000	252.000	245.000	36.400	41.500	33.200	13.900	10.700
19	10.100	58.600	156.000	99.400	90.500	218.000	217.000	36.100	31.900	34.100	13.800	8.540
20	22.600	47.200	221.000	101.000	91.600	183.000	192.000	33.400	32.200	17.700	15.000	13.000
21	25.400	37.400	246.000	91.600	87.000	184.000	169.000	43.400	28.900	13.300	13.900	9.520
22	36.900	26.400	230.000	110.000	101.000	210.000	151.000	35.400	29.400	18.300	10.600	8.500
23	58.600	40.100	189.000	146.000	112.000	250.000	137.000	35.100	41.000	27.200	10.600	8.500
24	55.900	57.600	157.000	200.000	170.000	290.000	123.000	30.900	54.200	16.700	10.600	9.570
25	45.000	71.400	140.000	251.000	206.000	311.000	111.000	30.100	36.800	30.900	12.800	11.700
26	40.000	105.000	128.000	254.000	288.000	307.000	104.000	37.600	28.200	25.100	10.600	10.500
27	30.100	145.000	108.000	238.000	396.000	290.000	96.700	50.400	30.000	24.100	11.800	11.500
28	20.100	152.000	94.300	208.000	496.000	257.000	92.300	56.700	26.200	14.000	9.690	26.700
29	14.800	136.000	91.100	201.000		225.000	81.900	39.000	20.800	17.400	7.960	28.800
30	21.600	115.000	93.900	213.000		193.000	67.300	49.300	13.700	19.000	9.520	13.400
31	21.800		93.000	211.000		199.000		52.600		30.100	8.380	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	WEST VIRGINIA
MAJOR BASIN	OHIO RIVER
MINOR BASIN	OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION	OHIO RIVER AT HUNTINGTON, WEST VIRGINIA 38

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	13	-	-	-	-	-	-	5	9	8	11	13	14						
10	9	61	10	18	0	1	0	1	0	1	6	8	15	10	21	13						
10	16	61	10	25	-	-	-	-	-	-	7	8	12	10	19	13						
10	23	61	11	1	-	-	-	-	-	-	10	11	14	13	24	17						
11	13	61	11	24	0	1	0	2	0	2	8	10	13	14	21	17						
11	20	61	11	30	-	-	-	-	-	-	8	11	14	14	22	18						
11	27	61	12	5	-	-	-	-	-	-	50	9	12	6	62	11						
12	4	61	12	12	-	-	-	-	-	-	5	4	15	5	20	6						
12	11	61	12	18	0	1	0	1	0	1	25	5	10	6	35	8						
12	18	61	12	28	-	-	-	-	-	-	18	7	16	7	34	10						
12	26	61	1	3	-	-	-	-	-	-	22	7	19	7	41	10						
2	12	62	2	21	0	1	0	1	0	1	22	5	15	5	37	7						
2	19	62	3	2	-	-	-	-	-	-	14	4	14	5	28	6						
2	26	62	3	9	-	-	-	-	-	-	135	24	37	9	172	26						
3	5	62	3	14	-	-	-	-	-	-	69	11	22	6	91	13						
3	12	62	3	22	1	1	0	1	1	1	24	5	19	5	43	7						
3	19	62	4	4	-	-	-	-	-	-	41	8	16	7	57	11						
3	26	62	4	3	-	-	-	-	-	-	55	8	11	5	66	9						
4	2	62	4	12	-	-	-	-	-	-	97	11	66	7	163	13						
4	9	62	4	25	0	1	1	1	1	1	46	11	13	5	59	12						
4	16	62	4	30	-	-	-	-	-	-	32	8	19	7	51	11						
4	23	62	5	23	-	-	-	-	-	-	15	8	11	8	26	11						
4	30	62	5	31	-	-	-	-	-	-	13	7	9	9	22	11						
5	7	62	7	11	-	-	-	-	-	-	5	6	16	8	21	10						
5	14	62	6	20	0	1	0	0	0	1	3	5	7	8	10	9						
5	21	62	6	26	-	-	-	-	-	-	1	6	17	9	18	11						
5	28	62	6	29	-	-	-	-	-	-	1	3	14	4	15	5						
6	4	62	7	2	-	-	-	-	-	-	1	10	26	13	27	16						
6	11	62	7	9	0	1	1	2	1	2	2	6	19	9	21	11						
6	18	62	8	13	-	-	-	-	-	-	66	7	23	12	89	14						
6	27	62	9	7	-	-	-	-	-	-	2	5	13	8	15	9						
7	5	62	8	3	-	-	-	-	-	-	1	3	5	4	6	5						
7	12	62	8	17	0	1	0	1	0	1	2	5	23	8	25	9						
7	30	62	8	22	-	-	-	-	-	-	0	6	14	8	14	10						
8	13	62	8	23	0	0	0	1	0	1	2	5	12	8	14	9						
8	20	62	9	5	-	-	-	-	-	-	0	2	6	4	6	4						
9	4	62	9	30	-	-	-	-	-	-	0	11	1	10	1	15						
9	10	62	9	25	0	1	0	2	0	2	9	11	38	18	47	21						
9	17	62	10	8	-	-	-	-	-	-	15	10	31	13	46	16						
9	24	62	10	16	-	-	-	-	-	-	2	11	8	14	10	18						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WEST VIRGINIA
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
HUNTINGTON, WEST VIRGINIA 38

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	1600	0	100	350	0	40	0	870	210	40	20	69	2	68	2	71	1														
10	16	61	2100	20	20	790	0	120	0	870	230	330	210	71	2	69	2	31	1	40	1												
11	6	61	2400	40	0	370	0	250	170	1100	460	290	270	69	2	51	1	92	1														
11	13	61	1100	0	20	330	0	60	40	520	150	100	20	69	1	68	1																
11	20	61	1700	0	110	420	0	60	0	630	510	50	340	68	2	92	2	25	1	38	1												
12	4	61	1900	70	50	650	0	20	0	560	560	90	180	38	2	69	2	68	1	92	1												
12	18	61	900	0	0	40	0	0	0	150	700	80	250	92	1																		
1	2	62	400	0	0	50	0	20	0	50	250	0	110																				
1	15	62	400	0	0	40	0	60	0	60	230	0	80																				
2	5	62	500	0	0	50	0	0	0	50	380	10	140	92	1																		
2	19	62	600	0	20	0	0	60	0	270	210	0	0																				
3	19	62	700	0	0	0	0	40	0	100	500	60	270	92	1	82	1																
3	5	62	1700	0	0	40	0	60	80	170	1300	150	370	92	2	82	1																
4	2	62	800	0	0	0	0	20	0	120	620	20	0	92	1																		
4	16	62	500	0	0	0	0	40	20	50	420	20	340	92	1																		
5	7	62	5100	0	270	590	0	130	110	3190	870	1060	360	71	4	68	4	69	2	92	2	38	2	17	1	77	1						
5	21	62	3300	0	130	660	0	250	80	230	1930	270	120	92	4	77	2	38	1	51	1	68	1										
6	4	62	8600	210	60	2340	270	600	100	3660	1370	810	40	68	4	71	4	92	3	25	3	69	2	38	2	40	2	51	2	50	1	5	1
6	18	62	33100	300	170	9370	510	0	130	18950	3670	7010	1770	58	7	38	6	71	5	69	5	92	5	24	3	77	3	45	1	30	1	44	1
7	5	62	9100	210	420	1810	210	210	0	4220	2030	2030	680	71	5	92	4	69	3	38	3	17	1	39	1	3	1	50	1	51	1		
7	30	62	2600	110	0	400	0	210	0	1270	590	340	340	68	3	69	2	92	1	88	1	31	1	51	1								
8	13	62	2900	190	170	410	0	270	60	1370	250	170	210	69	3	15	2	51	1														
8	20	62	6500	100	1780	1470	0	790	80	1530	700	290	370	22	3	68	3	51	3	11	2	92	2	15	2	69	2	38	2	24	1	71	1
9	4	62	5700	40	1350	1240	320	40	0	1140	1560	80	640	92	3	68	3	88	2	24	2	15	2	16	2	38	2	11	2	50	2	69	1
9	17	62	3100	40	830	770	0	410	80	660	330	40	120	16	2	51	2	38	1	69	1	15	1	31	1								

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WEST VIRGINIA
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
HUNTINGTON, WEST VIRGINIA 038

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml	MICROINVERTEBRATES																			
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT				1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	56	49	58	37	89	4	92	2	8	0	20	65	11	3	22	2	17	1					17	76	2	50	2			0	0
10	16	61	82	27	58	18	56	15	89	9	31	0	20	267	11	5	17	4	21	3	2	2	14	1	14	50	2	51	1	76	1	0	0
11	6	61	56	62	89	8	58	7	26	4	19	0	10	61	11	4									9	50	1	51	1			1	0
11	13	61	56	81	58	6	89	2	26	2	9	0	30	188	11	4	17	4	18	4	2	2	46	1	15	50	3	51	1			0	0
11	20	61	56	44	89	36	26	6	58	2	12	70	0	30	11	2	17	1							3							1	0
12	4	61	56	45	57	7	92	6	89	6	37	160	0	5											0							0	0
12	18	61	56	28	47	17	62	11	92	7	37	0	0	2											0							0	0
1	2	62	56	10	92	9	89	6	26	5	70	70	0	1											0							1	0
1	15	62	56	26	89	17	92	14	36	4	39	60	0	4											1							1	0
2	5	62	26	21	92	15	36	10	65	5	49	20	0	1											0							1	1
2	19	62										0	0	1											0							0	0
3	5	62	92	21	62	9	26	8	36	5	57	100	0	0											0							0	0
3	19	62	92	11	26	9	36	7	82	7	66	80	0	0											0							0	0
4	2	62	92	13	56	9	26	8	65	6	64	20	0	0											0							0	0
4	16	62	89	8	92	8	56	7	36	7	70	0	0	0											1							0	0
5	7	62	82	22	27	15	9	11	57	11	41	20	0	88	2	4	11	3	21	1					2							0	1
5	21	62	92	72	45	7	9	6	26	3	12	60	20	175	11	8	2	5	17	5	21	4	46	1	22	50	3	76	2	51	1	0	1
6	4	62	56	26	92	19	28	16	82	16	23	480	0	232	46	5	2	4	11	3	15	2	22	1	58	76	4	50	3	51	2	0	0
6	18	62	56	43	58	17	92	16	57	7	17	590	0	381	11	6	2	4	22	3	46	3	17	2	34	50	4	76	2			0	0
7	5	62	56	39	28	17	92	15	26	6	23	130	0	69	11	4	17	2	22	1					77	76	3	50	3	73	2	1	0
7	30	62	56	78	26	5	27	4	58	4	9	0	0	29	17	2	11	1	22	1					23	51	2	53	2			0	0
8	13	62	56	75	26	9	47	7	57	3	6	0	0	49	22	2	2	2	17	1	21	1			18	50	3	53	2			0	0
8	20	62	56	47	58	19	26	15	92	6	13	0	0	5											8	51	2					0	0
9	4	62	56	67	26	8	58	8	92	5	12	0	0	73	11	3	22	2	17	1					47	50	4	51	3	52	2	0	0
9	4	62	56	67	26	8	58	9	92	5	12	0	0	73	11	3	22	2	17	1					47	50	4	51	3	52	2	-	-
9	17	62	56	45	26	14	58	8	28	5	28	0	0	327	11	6	22	4	18	4	17	3	2	2	83	50	5	76	3	51	2	0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE WEST VIRGINIA
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
HUNTINGTON, WEST VIRGINIA 38

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	12	61	10	31	3022	638	317	321	13	70	111	3	6	85	17	29	51	3	40
11	13	61	12	1	2900	528	196	332	8	39	73	5	7	58	3	25	22	4	25
12	20	61	1	15	3172	-	*	41*	-	-	-	-	-	-	-	-	-	-	-
2	5	62	2	21	3592	246	116	130	2	22	55	12	8	33	2	12	7	2	16
3	4	62	3	19	3030	241	93	148	4	19	39	8	5	24	2	10	7	2	12
4	1	62	4	23	5022	152	90	62	7	20	33	6	5	22	0	8	7	1	14
6	4	62	6	27	2332	522	288	234	9	63	124	7	10	98	9	35	26	6	25
9	1	62	9	20	3232	614	292	322	6	76	99	3	4	91	1	35	32	6	38

* LABORATORY ACCIDENT

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WEST VIRGINIA
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
HUNTINGTON, WEST VIRGINIA 38

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700
10	4	61	21.3	5.0	7.2	-	-	-	-	.5	58	37	162	10	20	130	-	420	-
10	11	61	20.5	5.0	7.3	-	13	-	-	.8	64	43	162	5	14	156	-	400	-
10	16	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	190
10	18	61	18.3	5.0	7.0	-	-	-	-	.7	72	36	202	10	16	192	-	420	-
10	23	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2000
10	25	61	16.2	5.0	7.4	-	-	-	-	.5	35	50	130	20	75	130	-	260	-
10	30	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1200
11	1	61	15.0	7.5	7.0	-	-	-	-	.4	39	29	140	15	29	144	-	280	-
11	6	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	510
11	8	61	12.8	8.0	7.0	-	-	-	-	.6	56	33	158	10	25	163	-	370	-
11	12	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140
11	15	61	14.6	9.0	6.9	-	19	-	-	.6	49	25	160	10	24	187	-	360	-
11	20	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	420
11	22	61	10.0	10.5	7.1	-	-	-	-	.7	64	33	202	15	25	250	-	460	-
11	27	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	13000
11	29	61	6.5	10.5	7.0	-	-	-	-	.6	30	36	142	15	120	149	-	260	-
12	4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
12	11	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	*10
12	13	61	5.7	7.0	7.1	-	-	-	-	.4	35	36	104	30	100	120	-	220	-
12	18	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	-
12	20	61	6.0	2.0	7.0	-	-	-	-	.5	15	30	82	15	500	82	-	200	-
12	26	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	36
12	27	61	5.0	9.0	7.0	-	-	-	-	.4	17	28	90	15	75	67	-	160	-
1	1	62	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	18
1	3	62	2.8	9.0	7.2	-	-	-	-	1.0	19	29	90	15	30	77	-	180	-
1	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1900
1	10	62	3.5	6.0	7.0	-	-	-	-	.3	15	33	108	15	270	67	-	120	-
1	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150
1	17	62	1.2	11.5	6.9	-	-	-	-	.5	19	25	92	20	75	82	-	-	-
1	22	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	490
1	24	62	2.4	12.3	6.9	-	-	-	-	.5	17	30	92	20	350	101	-	180	-
1	29	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	490
1	31	62	1.6	11.3	6.9	-	-	-	-	.3	16	26	94	20	280	72	-	200	-
2	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	330
2	7	62	1.6	11.7	7.0	-	-	-	-	.3	18	28	93	10	85	82	-	160	-
2	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	60
2	14	62	4.2	10.5	7.0	-	-	-	-	.3	17	28	83	10	65	-	-	120	-
2	21	62	5.2	10.1	7.0	-	-	-	-	.5	17	26	111	10	37	-	-	180	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	WEST VIRGINIA
MAJOR BASIN	OHIO RIVER
MINOR BASIN	OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION	OHIO RIVER AT HUNTINGTON, WEST VIRGINIA 38

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
2	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	-
2	28	62	7.3	.1	7.0	-	-	-	-	.4	12	28	73	20	700	70	-	180	-
3	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30000
3	7	62	5.4	12.0	6.8	-	-	-	-	.3	17	27	93	30	240	58	-	140	-
3	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
3	14	62	6.7	11.3	7.0	-	24	-	-	.3	16	29	86	20	240	70	-	180	-
3	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1500
3	21	62	7.2	8.7	7.1	-	-	-	-	.3	20	26	90	15	190	55	-	200	-
3	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	490
3	28	62	11.5	8.0	6.9	-	-	-	-	.3	13	22	74	25	200	50	-	180	-
4	4	62	10.2	7.4	6.9	-	-	-	-	.3	14	26	92	20	140	55	-	140	-
4	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	550
4	11	62	10.8	5.2	6.9	-	-	-	-	.4	11	25	90	20	130	-	-	100	-
4	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	54	.1	-	1100
4	18	62	11.8	7.5	6.9	-	10	-	-	.3	15	27	80	15	105	-	-	160	-
4	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
4	25	62	12.2	5.5	7.0	-	-	-	-	.3	-	27	-	15	75	-	-	200	-
4	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
5	2	62	18.4	5.2	7.1	-	-	-	-	.3	12	32	118	10	20	-	-	170	-
5	9	62	18.8	-	7.2	-	-	-	-	.4	20	35	120	10	20	-	-	200	-
5	14	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
5	16	62	21.8	6.2	7.2	-	-	-	-	.9	42	34	140	5	25	-	-	260	-
5	21	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	190
5	23	62	22.2	5.5	7.0	-	-	-	-	.6	36	38	160	5	20	-	-	280	-
5	30	62	23.3	-	7.1	-	-	-	-	.5	38	36	142	5	18	-	-	280	-
6	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
6	6	62	23.3	4.0	7.1	-	-	-	-	.5	40	37	148	10	14	-	-	280	-
6	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
6	20	62	24.6	5.8	7.2	-	-	-	-	.4	47	27	154	10	28	-	-	360	-
6	27	62	28.0	5.0	7.1	-	-	-	-	.5	38	25	142	5	20	-	-	300	-
7	4	62	28.0	5.4	7.0	-	-	-	-	.4	47	21	154	10	16	-	-	280	-
7	11	62	29.0	6.2	7.1	-	-	-	-	.4	52	25	154	10	15	-	-	260	-
7	18	62	29.4	5.8	7.2	-	-	-	-	.4	52	24	166	15	40	-	-	260	-
7	25	62	28.6	5.6	7.2	-	-	-	-	.4	58	25	172	15	20	139	-	220	-
7	30	62	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
8	1	62	29.2	5.0	7.2	-	-	-	-	.4	61	26	170	20	40	-	-	200	-
8	8	62	28.8	4.6	7.1	-	-	-	-	.4	58	27	164	10	17	-	-	200	-
8	15	62	29.2	4.2	7.1	-	-	-	-	.4	61	29	170	10	18	-	-	180	-
8	22	62	29.4	4.8	7.2	-	-	-	-	.5	64	30	178	10	20	-	-	160	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WEST VIRGINIA

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION OHIO RIVER AT

HUNTINGTON, WEST VIRGINIA 38

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	29	62	28.6	5.0	7.2	-	-	-	-	.4	67	30	184	5	12	-	-	160	-
9	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	660
9	5	62	27.2	4.0	7.1	-	-	-	-	.2	-	32	220	15	16	-	-	360	-
9	10	62	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	70
9	12	62	25.2	4.2	7.0	-	-	-	-	.4	-	35	218	5	14	-	-	110	-
9	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
9	19	62	22.2	1.5	7.0	-	-	-	-	1.0	78	35	202	5	14	-	-	260	-
9	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	130
9	26	62	21.6	2.4	7.3	-	-	-	-	.9	78	37	210	5	9	226	-	520	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Huntington, West Virginia
Operated by U.S. Geological Survey

STATE West Virginia
MAJOR BASIN Ohio River
MINOR BASIN Ohio River-Main Stem and Minor Trib.
STATION LOCATION Ohio River at
Huntington, West Virginia

October	November	December	January	February	March	April	May	June	July	August	September

DATA NOT AVAILABLE AT PRESENT TIME

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER BELOW
ADDISON, OHIO 117

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO	DAY	μμc/g	±	μμc/g	±
6	12	62	7	14	0	1	0	1	0	1	1	6	15	9	16	11						
6	19	62	7	17	0	1	0	1	0	1	4	10	40	34	44	35						
6	26	62	9	9	1	0	0	1	1	1	1	5	6	8	7	9						
7	3	62	8	2	0	1	1	2	1	2	7	11	16	14	23	18						
7	10	62	8	17	0	1	0	1	0	1	6	10	13	13	19	16						
7	17	62	8	13	0	1	0	1	0	1	4	6	19	8	23	10						
7	24	62	8	10	0	9	0	9	0	13	2	11	13	14	15	18						
7	31	62	8	21	0	1	0	1	0	1	2	10	19	13	21	16						
8	7	62	8	23	0	1	0	2	0	2	19	13	1	16	20	20						
8	14	62	9	19	0	1	0	1	0	1	10	12	14	8	24	14						
8	21	62	9	5	0	1	0	1	0	1	0	5	2	8	2	9						
8	28	62	9	11	0	1	0	1	0	1	17	13	21	18	38	22						
9	4	62	9	17	0	1	0	0	0	1	10	9	12	14	22	17						
9	11	62	10	1	1	2	0	2	1	3	12	26	40	20	52	33						
9	17	62	10	5	0	1	0	1	0	1	7	13	23	19	30	23						
9	24	62	10	15	0	1	0	2	0	2	2	10	16	16	18	19						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER BELOW
ADDISON, OHIO 117

DATE OF SAMPLE			ALGAE *(Number per milliliter)*										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED *(Pigmented)*		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
6	19	62	31900	3690	0	15150	210	1820	120	7830	3110	1820	620		38	6	68	6	40	5	25	5	92	5	9	5	71	4	51	4	3	3	69	3
7	3	62	15400	1180	3550	5110	0	0	80	1350	4140	930	170		92	5	16	5	38	5	10	3	68	3	40	2	69	2	88	2	17	2		
7	17	62	3500	210	40	770	170	230	170	500	1410	170	120		92	3	68	1	88	1	51	1	77	1	44	1	39	1	38	1	3	1	50	1
8	7	62	1400	80	110	490	0	60	0	210	420	210	80		92	1	38	1	31	1														
8	21	62	2300	110	650	700	0	80	0	460	340	130	250		15	2	69	2	38	1														
9	4	62	9700	760	4350	2490	0	130	0	1310	630	300	420		16	5	68	3	38	2	40	2	69	2	92	2	24	2	25	1	88	1	2	1
9	17	62	2000	20	70	1420	0	50	0	270	160	290	180		26	2	38	2	24	1														

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OHIO

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION OHIO RIVER BELOW

ADDISON, OHIO 117

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
6	19	62	56	52	92	15	26	11	58	5	17	0	0	2860	11	9	22	6	2	3	17	2			116	50	4	76	3	51	2	1	0
7	3	62	56	41	89	20	92	13	57	5	21	0	0	313	11	6	2	3	22	2	17	2			80	50	4	76	4	51	3	0	0
7	17	62	56	33	89	26	92	7	70	6	28	0	0	120	11	3	17	3	2	3	9	2	22	1	36	76	3	50	3	53	2	0	0
8	7	62	56	42	89	31	92	5	26	4	18	0	0	376	17	6	2	4	22	2	11	2	16	1	101	53	5	76	3	50	3	0	0
8	21	62	56	45	58	16	26	11	89	6	22	0	0	23	2	1	17	1	11	1					42	50	3	51	3	77	1	0	0
9	4	62	56	66	26	10	89	5	92	4	15	0	0	251	22	5	11	4	46	4	2	3	17	2	155	50	5	53	4	76	4	0	0
9	17	62	56	41	82	20	26	9	89	9	21	0	0	1670	11	8	17	7	46	5	2	5	22	4	54	50	4	76	4	52	1	0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE OHIO

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION OHIO RIVER BELOW

ADDISON, OHIO 117

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLOROFORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGENATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
6	4	62	6	13	5003	238	123	115	6	28	47	6	4	37	0	17	12	2	11
7	17	62	7	26	5039	222	118	104	1	18	45	5	3	35	2	15	10	2	27
8	16	62	8	27	5010	345	174	171	2	28	66	3	3	56	4	28	19	4	27
9	14	62	9	25	5103	352	119	233	2	22	45	1	2	39	3	18	14	2	16

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER BELOW
ADDISON, OHIO 117

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	12	62	28.2	7.1	7.5	-	-	2.6	5.9	.5	39	28	190	-	-	158	-	328	-
6	19	62	26.5	8.0	7.3	-	-	2.8	5.9	.5	37	21	191	-	-	183	-	359	-
6	26	62	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
7	3	62	28.2	7.0	7.2	-	-	3.4	5.6	1.0	36	17	199	-	-	220	-	416	-
7	10	62	27.8	7.1	7.4	-	-	2.6	6.9	.5	47	26	177	-	-	135	-	324	-
7	17	62	28.2	6.4	7.4	-	-	2.2	4.3	.6	49	25	170	-	-	145	-	320	-
7	24	62	28.2	6.4	7.3	-	-	2.6	4.4	1.1	50	28	185	-	-	145	-	323	-
7	31	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	860
8	6	62	28.3	5.6	7.3	-	-	3.3	5.3	1.1	74	39	188	-	-	130	-	365	-
8	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
8	14	62	27.8	7.4	7.5	-	-	1.8	3.9	.5	86	30	220	-	-	155	-	434	300
8	21	62	29.2	6.8	7.3	-	-	2.6	4.6	.8	81	30	222	-	-	160	-	441	200
8	27	62	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
8	28	62	29.0	7.4	8.1	-	-	2.1	4.3	.9	78	32	232	30	-	203	-	488	100
9	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
9	4	62	27.5	6.5	7.6	-	17	3.1	4.7	.8	80	29	210	15	5	189	-	479	-
9	11	62	25.4	6.8	7.3	-	-	2.9	3.9	1.0	88	30	220	10	5	170	-	463	520
9	17	62	26.1	7.1	7.7	-	28	2.5	3.8	1.1	84	24	198	20	5	180	-	454	300
9	24	62	23.0	7.0	7.8	-	10	3.0	4.3	2.0	102	22	206	15	5	188	-	530	30
9	25	62	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Pomeroy, Ohio
Operated by U.S. Geological Survey

STATE	Ohio
MAJOR BASIN	Ohio River
MINOR BASIN	Ohio River-Main Stem and Minor Trib.
STATION LOCATION	Ohio River below Addison, Ohio

October	November	December	January	February	March	April	May	June	July	August	September

DATA NOT AVAILABLE AT PRESENT TIME

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE OHIO

MAJOR BASIN OHIO RIVER

MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION OHIO RIVER AT

EAST LIVERPOOL, OHIO 39

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	4	61	10	14	-	-	-	-	-	-	3	10	29	15	32	18						
10	17	61	10	25	-	-	-	-	-	-	2	11	33	15	35	19						
11	6	61	11	17	-	-	-	-	-	-	4	11	21	15	25	19						
11	27	61	12	5	2	2	0	1	2	2	28	8	23	7	51	11						
2	20	62	3	6	0	1	1	2	1	2	13	4	20	6	33	7						
3	20	62	4	6	1	1	0	1	1	1	23	5	15	5	38	7						
4	3	62	4	12	-	-	-	-	-	-	54	8	14	7	68	11						
4	9	62	4	26	2	1	0	1	2	1	11	5	25	6	36	7						
4	22	62	5	22	-	-	-	-	-	-	5	6	22	8	27	10						
5	22	62	6	26	1	1	1	1	2	1	11	6	16	8	27	10						
6	4	62	9	19	-	-	-	-	-	-	1	5	12	8	13	9						
6	18	62	8	14	0	0	0	1	0	1	1	5	19	8	20	9						
7	3	62	8	7	-	-	-	-	-	-	4	5	10	8	14	9						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVFR AT
EAST LIVERPOOL, OHIO 39

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	1100	20	0	350	20	250	0	190	270	20	40	68	1																		
10	17	61	10600	0	0	250	0	10290	0	40	0	20	0	51	7	24	1																
11	6	61	600	0	0	0	0	520	0	20	80	0	20	51	2																		
11	20	61	400	0	40	40	0	130	0	20	120	0	0																				
12	5	61	100	0	0	20	0	20	0	20	0	40	0																				
12	18	61	200	0	0	0	0	20	0	40	150	0	20																				
1	3	62	100	0	0	0	0	40	0	0	40	0	0																				
1	17	62	100	0	0	0	0	0	0	0	90	20	70																				
2	5	62	100	0	0	0	0	0	0	0	80	0	0																				
2	19	62	00	0	0	0	0	0	0	0	50	0	0																				
3	5	62	100	0	0	0	0	0	0	0	150	40	40																				
3	20	62	1000	0	0	20	0	120	60	80	700	20	120	92	1	82	1																
4	3	62	1600	0	0	40	0	40	20	120	1410	0	230	92	1	82	1																
4	16	62	1600	0	0	140	0	50	0	610	790	230	230	69	1	92	1	88	1														
5	9	62	5300	0	150	510	0	610	0	1120	2930	420	1080	92	4	71	3	57	2	68	2	38	2	77	1	88	1						
5	22	62	16400	0	3080	10210	0	210	840	970	1010	420	460	68	6	38	6	17	5	60	3	25	2	92	2	71	1	51	1				
6	4	62	10800	0	930	8440	0	0	0	840	630	210	250	38	5	24	4	17	3	40	3	25	2	34	2	37	1	32	1	44	1	30	1
6	18	62	3000	0	130	720	0	0	0	1460	720	250	210	69	4	38	1	92	1														
7	3	62	12500	510	510	4600	0	170	170	5360	1180	550	420	69	6	40	5	30	3	38	3	88	3	17	2	10	2	68	2	92	1	3	1
7	19	62	6200	0	0	3540	0	0	460	1820	380	250	130	38	4	68	3	69	3	62	2	40	2	29	1	26	1	25	1	30	1	44	1
8	9	62	10100	250	0	4540	0	1700	100	2550	950	540	290	38	5	68	4	51	4	40	2	24	2	71	1	92	1	87	1	37	1		
8	21	62	4400	1480	0	1410	0	550	0	930	0	130	0	4	4	38	3	51	2	69	2	68	2	3	1	30	1	40	1				
9	4	62	8200	0	0	970	0	270	60	5220	1700	1780	370	68	6	92	3	38	2	71	2	51	1	44	1	88	1	39	1	69	1		
9	17	62	3400	0	40	1860	0	620	410	290	210	40	40	38	3	51	2	60	2	25	1	69	1	35	1								

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
EAST LIVERPOOL, OHIO 039

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	4	61	56	64	26	13	89	5	70	4	14	7140	0	55	18	3	17	1	11	1	2	1			14	76	2	50	1			0	0
10	17	61										0	0	20	2	2									8	50	1	76	1			0	0
11	6	61	26	16	70	9	92	6	71	5	64	0	0	17	2	2									0							0	0
11	20	61										20	0	3											0							0	0
12	5	61	62	7	36	6	92	6	26	5	76	1660	0	0											0							0	0
12	18	61										0	0	2											0							0	0
1	3	62										40	0	0											0							0	0
1	17	62	92	10	36	8	62	8	2	6	68	0	0	0											0							0	0
2	5	62										20	0	0											0							0	0
2	19	62										20	0	0											0							0	0
3	5	62	62	12	92	9	2	8	36	7	64	0	0	0											0							1	0
3	20	62	92	20	36	14	62	13	93	6	47	0	0	4											2							0	0
4	3	62	36	11	62	11	92	11	45	7	60	40	0	3											0							2	1
4	16	62	92	12	36	8	64	5	71	5	70	70	0	0											0							0	0
5	9	62	92	57	82	5	26	3	45	3	32	0	0	0											2							2	0
5	22	62	92	47	26	6	36	5	62	4	38	0	0	36	2	3									2							0	0
6	4	62	92	32	26	8	9	6	64	6	48	0	0	131	15	4	2	3	11	2					13	50	1	76	1			0	0
6	18	62	56	40	92	15	47	4	26	3	38	0	0	196	2	5	11	4							10	50	1	51	1			1	0
7	3	62	56	36	57	33	70	10	26	4	17	40	0	1410	11	8	17	5	22	3	2	2			45	76	4	50	3			0	0
7	19	62	57	38	56	38	26	6	47	3	15	40	0	344	11	6	17	4	15	2	18	2	2	1	86	76	4	51	4	50	4	0	0
8	9	62	26	46	56	32	57	12	58	2	8	0	0	137	11	4	22	3	18	3	17	3			26	51	3	50	2	76	2	0	0
8	21	62	56	80	26	6	92	4	57	3	7	0	0	290	11	5	17	5	16	2	2	2	15	1	174	51	5	76	2	50	1	0	0
9	4	62	56	45	26	20	57	10	92	10	15	0	0	267	11	5	17	3	2	3	18	3	7	2	134	51	5	50	4	76	3	0	0
9	17	62	56	54	57	24	26	7	82	3	12	0	0	549	11	7	17	4	18	3	2	3	21	1	210	51	5	50	5	76	4	0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
EAST LIVERPOOL, OHIO 39

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES					CHLOROFORM EXTRACTABLES								
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	10	61	10	23	5610	374	159	215	5	22	72	20	12	35	5	21	13	3	23
11	13	61	12	7	3920#	353	143	210	3	13	72	32	15	25	0	12	4	1	38
12	27	61	1	11	4360	232	130	102	1	9	91	48	17	21	5	16	3	1	9

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN OHIO RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION OHIO RIVER AT
EAST LIVERPOOL, OHIO 39

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
11	6	61	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-
12	6	61	-	-	5.5	-	-	-	-	-	32	4	240	0	0	260	.0	419	-
12	7	61	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-
1	11	62	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-
4	22	62	-	-	7.2	-	-	-	-	-	14	12	100	5	-	100	.0	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Sewickley, Pennsylvania
Operated by U.S. Geological Survey

STATE	Ohio
MAJOR BASIN	Ohio River
MINOR BASIN	Ohio River-Main Stem & Minor Trib.
STATION LOCATION	Ohio River at East Liverpool, Ohio

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	5.080	8.000	26.000	13.900	35.500	112.000	92.700	24.400	9.220	5.800	4.460	3.370
2	5.000	9.990	20.500	13.400	31.000	90.400	85.800	30.200	10.600	4.320	4.390	13.100
3	5.480	10.600	16.600	13.400	28.500	90.400	83.500	34.600	8.900	8.000	4.320	6.040
4	6.920	10.800	13.700	14.200	28.500	83.500	74.600	38.200	7.460	7.030	4.250	6.040
5	6.920	8.900	14.200	15.900	32.800	68.000	65.800	33.700	10.600	6.650	4.390	7.100
6	8.000	7.910	15.000	20.500	42.000	53.100	57.300	27.600	15.600	6.040	4.250	6.830
7	7.730	8.900	16.600	48.700	42.000	45.000	72.400	24.400	17.500	6.040	4.180	6.380
8	6.040	10.500	19.000	95.000	39.200	41.100	102.000	23.600	13.200	5.640	5.460	5.560
9	5.400	10.400	17.500	76.800	34.600	35.500	102.000	23.600	10.800	4.460	6.420	4.180
10	5.240	10.200	14.600	68.000	30.200	31.000	88.100	23.600	7.730	4.530	4.760	3.690
11	5.560	9.110	13.900	48.000	23.600	30.200	88.100	21.200	6.470	4.530	4.840	4.390
12	5.400	8.400	20.600	37.300	19.800	57.600	83.500	20.500	7.340	4.460	4.530	4.920
13	5.160	7.640	29.400	28.500	20.500	88.100	95.000	17.000	17.600	4.460	4.600	4.600
14	7.010	9.000	34.600	21.200	22.000	88.100	102.000	15.400	26.000	4.460	4.530	4.390
15	7.100	10.200	39.200	19.000	22.000	88.100	97.300	15.800	30.200	4.760	4.920	4.110
16	8.000	13.200	35.500	27.800	20.500	74.600	97.300	14.800	28.500	4.390	4.530	3.760
17	7.550	19.100	31.900	31.900	20.500	63.600	90.400	14.800	22.800	5.640	4.530	3.550
18	6.920	26.000	38.200	30.200	19.800	48.000	79.000	13.500	18.300	7.190	4.250	3.410
19	6.830	24.400	57.300	28.500	18.300	39.200	70.200	14.100	15.900	6.120	4.180	3.480
20	6.200	22.000	57.300	26.000	25.200	42.000	57.300	11.800	14.200	5.160	3.690	3.620
21	6.830	19.800	57.300	20.500	27.600	57.300	53.100	9.000	14.800	5.240	4.040	3.620
22	9.110	17.000	57.300	24.500	26.800	101.000	48.000	9.660	13.100	5.000	4.110	3.480
23	6.740	17.300	50.000	48.800	32.000	130.000	42.000	10.200	9.880	4.600	4.390	3.340
24	6.650	36.600	43.000	59.400	85.200	120.000	44.000	10.500	9.330	4.920	4.320	3.270
25	7.640	76.800	36.400	61.500	74.600	114.000	47.000	11.000	8.700	5.960	3.760	3.200
26	7.730	72.400	30.200	61.500	65.800	104.000	42.000	12.500	7.910	6.040	3.480	3.620
27	7.010	57.300	25.200	65.800	79.000	90.400	34.600	12.600	7.730	5.560	3.760	4.130
28	6.830	45.000	25.200	65.800	104.000	72.400	29.400	10.400	6.560	5.480	3.020	10.700
29	6.470	35.500	24.400	63.600		59.400	24.400	12.000	6.470	5.320	2.900	10.200
30	6.650	30.200	22.000	61.500		53.100	20.500	12.900	6.120	4.600	3.080	10.100
31	7.280		18.300	48.000		63.600		9.220		4.250	3.020	

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Arkansas-Louisiana State Line
Operated by U.S. Geological Survey

STATE Louisiana

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Ouachita River

STATION LOCATION Ouachita River at
Bastrop, Louisiana

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	3.170	2.850							1.680	1.540	2.160	2.240
2	4.420	2.750							2.860	1.400	1.950	2.380
3	5.140	3.210							5.780	2.000	1.770	5.000
4	5.710	3.870							6.000	2.100	1.410	6.500
5	6.440	4.300							6.020	1.900	1.410	7.310
6	7.300	4.940							6.100	1.900	1.360	7.140
7	7.710	4.990	12.500				AVAILABLE		6.100	1.600	1.200	6.730
8	7.630	4.070	10.100						7.090	1.500	1.000	6.000
9	7.310	3.610	8.750						7.290	1.400	1.000	5.000
10	5.780	3.610	10.200						7.620	1.300	1.000	4.000
11	4.410	3.600							9.450	1.500	1.000	5.000
12	2.740	4.320							10.300	1.500	1.500	5.770
13	2.610	5.250							10.200	1.500	1.930	7.620
14	2.830	5.540			NOT				10.400	1.400	2.360	8.710
15	3.170	5.640							10.400	1.200	2.200	8.790
16	3.360	5.800							10.000	1.100	1.800	8.370
17	3.400	6.000							8.500	1.100	1.500	7.720
18	3.110	5.800							7.840	1.100	1.600	6.760
19	2.810	5.670							5.490	1.000	1.700	6.190
20	2.840	5.560						4.630	4.280	1.000	1.850	4.410
21	2.870	5.330						4.840	3.870	1.000	1.940	3.880
22	2.940	5.470						3.000	2.630	1.000	1.990	3.990
23	3.050	6.360						1.500	1.550	1.000	1.870	4.270
24	3.070	8.810	DATA					1.400	1.430	1.000	1.970	4.310
25	2.760	14.800						1.300	1.580	1.000	2.550	3.970
26	2.570	15.700						1.200	1.580	2.000	2.720	3.560
27	2.370	17.000						1.200	2.040	2.000	2.730	3.020
28	2.380	18.200						1.100	2.050	2.000	2.670	2.960
29	2.550							1.100	2.030	2.000	2.400	2.960
30	2.760							1.100	1.710	2.000	2.160	2.990
31	2.950							1.600		2.000	2.060	

No discharge measurements were made for part of the year because of high flows that could not be measured accurately. No records are available for these periods.

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE LOUISIANA

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN OUACHITA RIVER

STATION LOCATION OUACHITA RIVER AT

BASTROP, LOUISIANA 85

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	26	0	1	0	2	0	2	8	8	7	9	15	12						
10	9	61	10	24	3	2	1	1	4	2	14	6	14	5	28	8						
10	16	61	10	31	0	1	0	1	0	1	9	8	18	10	27	13						
10	24	61	11	2	1	1	3	2	4	2	2	9	6	11	8	14						
10	31	61	11	13	0	1	0	3	0	3	22	9	15	11	37	14						
11	6	61	11	16	0	1	1	2	1	2	18	8	24	11	42	14						
11	14	61	11	29	0	1	2	2	2	2	40	12	65	15	105	19						
11	20	61	12	1	3	5	2	3	5	6	9	15	36	12	45	19						
11	27	61	12	7	1	1	0	1	1	1	82	7	70	6	152	9						
12	4	61	12	12	0	1	0	1	0	1	34	7	49	7	83	10						
12	11	61	12	21	1	1	0	1	1	1	61	6	84	7	145	9						
12	27	61	1	5	1	1	1	1	2	1	46	6	73	6	119	8						
1	3	62	1	17	2	2	0	1	2	2	49	7	47	5	96	9						
1	9	62	1	22	1	1	1	1	2	1	61	6	74	6	135	8						
1	18	62	1	26	2	1	1	1	3	1	78	7	79	6	157	9						
1	22	62	2	2	0	1	0	1	0	1	67	6	76	6	143	8						
1	29	62	2	12	0	1	0	1	0	1	86	7	99	8	185	11						
2	5	62	2	15	1	1	0	1	1	1	86	6	98	6	184	8						
2	12	62	2	23	0	1	0	1	0	1	70	6	95	7	165	9						
2	26	62	3	12	0	1	0	1	0	1	52	5	62	5	114	7						
3	5	62	3	15	1	1	0	1	1	1	43	5	58	6	101	7						
3	12	62	3	26	1	1	0	1	1	1	48	5	51	6	99	7						
3	19	62	4	6	0	1	0	1	0	1	48	6	59	5	107	7						
3	26	62	4	4	0	1	0	1	0	1	48	5	45	5	93	7						
4	2	62	4	16	0	0	1	1	1	1	34	5	52	6	86	7						
4	9	62	4	20	0	0	0	0	0	0	36	5	48	5	84	7						
4	16	62	5	1	0	1	0	1	0	1	50	5	55	6	105	7						
4	23	62	5	28	1	1	0	1	1	1	62	8	32	8	94	11						
4	30	62	6	4	0	0	0	1	0	1	26	6	47	7	73	9						
5	7	62	6	11	0	1	0	1	0	1	48	6	49	8	97	10						
5	14	62	6	22	0	1	0	0	0	1	13	5	44	7	57	9						
5	21	62	6	25	1	1	0	1	1	1	24	6	36	7	60	9						
5	28	62	6	29	1	1	0	1	1	1	16	4	33	5	49	6						
6	4	62	7	5	0	1	0	1	0	1	35	6	37	8	72	10						
6	10	62	7	9	2	2	2	3	4	4	70	13	59	17	129	21						
6	18	62	8	10	6	-	0	-	6	-	42	24	33	8	75	25						
6	25	62	7	23	0	1	0	1	0	1	25	6	27	8	52	10						
7	2	62	8	3	1	1	0	1	1	1	17	13	45	17	62	21						
7	16	62	8	14	0	1	0	1	0	1	7	9	26	14	33	17						
7	23	62	8	20	1	2	1	4	2	4	16	11	36	13	52	17						
7	30	62	8	17	1	1	1	2	2	2	21	11	37	15	58	19						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE LOUISIANA

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN OUACHITA RIVER

STATION LOCATION OUACHITA RIVER AT

BASTROP, LOUISIANA 85

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	7	62	8	23	1	1	1	2	2	2	7	10	10	18	17	18						
8	20	62	9	5	0	0	1	2	1	2	0	5	14	10	14	11						
9	5	62	9	21	0	1	1	2	1	2	7	9	24	13	31	16						
9	10	62	9	27	0	1	0	1	0	1	4	12	22	16	26	20						
9	17	62	10	15	0	1	0	1	0	1	3	5	14	6	17	7						
9	24	62	10	17	0	1	0	1	0	1	15	6	15	7	30	9						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN OUACHITA RIVER
STATION LOCATION OUACHITA RIVER AT
BASTROP, LOUISIANA 85

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	500	0	0	60	0	80	0	230	100	60	20																				
10	16	61	400	0	0	60	0	150	20	120	80	20	20																				
11	6	61	200	0	20	0	0	80	0	40	100	40	20																				
11	22	61	200	0	0	50	0	50	0	140	0	50	70																				
12	4	61	200	0	0	60	0	0	20	20	60	0	20																				
1	3	62	00	0	0	0	0	0	0	20	0	0	0																				
1	15	62	100	0	0	0	0	70	0	20	20	0	50																				
2	5	62	100	0	0	0	0	0	0	50	50	110	0																				
2	19	62	600	60	0	80	0	250	150	60	40	20	0	51	1																		
3	5	62	3500	40	0	40	0	80	2830	210	260	0	20	65	4	62	1	63	1	97	1												
3	19	62	200	0	0	40	0	160	20	0	0	20	0																				
4	2	62	1300	0	0	100	0	730	410	20	20	0	0	60	2	57	1																
4	16	62	3700	0	0	180	0	470	2670	200	160	270	90	65	5																		
5	7	62	12800	11160	0	170	0	350	290	270	600	0	40	4	7	93	1	57	1	60	1	69	1	77	1								
5	21	62	1800	40	80	130	0	120	100	700	580	40	20	68	2	69	1	93	1	92	1												
6	4	62	1600	0	0	210	0	330	250	230	560	20	20	93	2	51	1																
6	18	62	3800	2900	0	120	0	330	40	170	250	0	80	51	1																		
7	2	62	6400	210	80	630	0	4070	80	550	760	250	40	51	5	69	1	68	1	71	1	93	1										
7	16	62	2100	120	0	700	0	830	0	210	210	120	120	51	3	25	2																
8	7	62	1100	20	0	150	0	210	0	410	330	40	0	69	1	68	1	92	1														
8	20	62	1000	40	0	40	0	0	20	550	380	40	130	88	2	68	1	69	1														
9	3	62	1500	80	0	290	0	330	100	330	330	40	120	69	1	51	1	88	1														
9	16	62	600	40	0	40	0	0	210	80	210	80	40	63	1																		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN OUACHITA RIVER
STATION LOCATION OUACHITA RIVER AT
BASTPOP, LOUISIANA 085

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	57	41	56	16	23	6	27	4	33	460	0	20	17	2									1							2	0
10	16	61	57	19	56	10	82	7	10	6	58	0	0	63	21	3	11	2	17	1					0							0	0
11	6	61	71	19	92	13	10	10	57	8	50	4220	0	1											1							0	0
11	22	61	10	21	56	11	57	8	70	7	53	50	0	0											0							0	0
12	4	61	56	12	10	11	43	7	57	7	63	0	0	6	11	1									0							0	0
1	3	62										0	0	1											0							0	0
1	15	62										20	0	12	11	1	17	1							0							0	0
2	5	62										0	0	7											0							0	0
2	19	62	92	17	51	13	43	11	9	9	50	20	0	2											0							0	0
3	5	62	43	31	95	16	94	10	92	9	34	0	0	7	17	1									3							0	0
3	19	62	43	28	56	15	95	10	9	7	40	0	0	0											0							0	0
4	2	62	95	47	56	21	43	15	57	5	12	20	10	26	46	2									5	76	1					0	0
4	16	62	95	35	56	26	43	13	57	8	18	20	0	2											1							0	0
5	7	62	95	62	56	28	9	3	58	2	5	0	0	48	11	2	21	2	17	1					0							0	0
5	21	62	56	27	95	22	92	17	10	8	26	20	0	149	11	4	17	4	22	1					17	51	2	76	1	50	1	0	5
6	4	62	95	59	58	11	56	7	57	4	19	0	0	29	17	2	11	1							8	51	1					0	0
6	18	62	95	44	58	9	43	8	57	7	32	11840	0	8											1							0	0
7	2	62	97	18	95	14	57	9	58	8	51	0	0	1590	17	8	22	6	21	3	7	3	2	3	21	50	3					0	2
7	16	62	58	78	56	5	57	3	95	2	12	0	0	2260	17	9	11	4	2	3	22	3	21	2	11	50	1					0	1
8	7	62	58	58	56	12	92	9	26	6	15	0	10	368	17	5	11	5	2	4	22	3			7	50	1	76	1			0	0
8	20	62	71	49	26	17	56	10	58	5	19	0	0	3											0							0	0
9	3	62	56	30	57	26	71	13	58	12	19	0	0	75	17	4	21	2	16	1	22	1	11	1	3	50	1					0	0
9	16	62	95	36	57	13	56	11	58	6	34	0	0	106	17	4	11	3	18	2	2	2	22	2	12	50	2	76	1			2	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN OUACHITA RIVER
STATION LOCATION OUACHITA RIVER AT
BASTROP, LOUISIANA 85

DATE OF SAMPLE MONTH	DAY	YEAR	TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND 1-HOUR mg/l	CHLORINE DEMAND 24-HOUR mg/l	AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
10	2	61	27.5	7.6	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9	61	20.0	7.8	6.7	-	-	-	-	-	-	-	-	35	-	-	.2	215	-
10	16	61	-	-	6.7	-	-	-	-	0	141	20	84	30	0	30	.1	309	-
10	24	61	21.0	9.1	6.9	-	-	-	-	-	145	25	84	-	10	10	.0	314	-
10	31	61	20.0	8.8	6.7	-	-	-	-	-	156	25	76	-	9	12	-	-	-
11	6	61	17.0	7.6	6.7	-	-	-	-	-	156	16	76	15	10	10	-	-	-
11	14	61	17.0	7.4	6.7	-	-	-	-	-	179	9	80	25	95	12	.2	-	-
11	20	61	15.0	8.4	6.7	-	-	-	-	-	108	25	92	20	-	9	.3	-	-
11	27	61	14.0	7.4	6.7	-	-	-	-	-	41	20	24	-	-	6	.1	104	-
12	4	61	13.0	6.9	6.5	-	-	-	-	-	32	20	40	-	-	9	.1	-	-
12	11	61	12.0	8.2	6.7	-	-	-	-	-	97	2	51	-	-	13	.2	-	-
12	27	61	8.0	7.8	6.5	-	-	-	-	.3	40	20	72	-	600	24	.0	-	-
1	3	62	8.0	8.2	6.5	-	-	-	-	.3	30	20	52	-	120	15	.1	-	-
1	9	62	6.0	8.4	6.7	-	-	-	-	.2	22	20	60	-	-	22	.2	-	-
1	15	62	6.0	8.8	6.7	-	-	-	-	.3	36	20	51	-	-	-	-	-	-
1	22	62	10.0	9.2	6.5	-	-	-	-	.3	42	20	64	-	-	23	1.0	-	-
1	29	62	7.0	8.8	6.5	-	-	-	-	.2	44	30	-	-	-	27	.2	-	-
2	5	62	11.0	8.6	6.5	-	-	-	-	.3	33	25	-	-	-	13	.2	-	-
2	12	62	12.0	7.2	6.7	-	-	-	-	.3	30	10	-	-	-	27	.3	-	-
2	19	62	13.0	6.0	6.5	-	-	-	-	.1	20	10	-	-	-	21	.1	-	-
2	27	62	16.0	6.3	6.4	-	-	-	-	.3	25	5	-	-	-	18	-	-	-
3	5	62	12.0	6.8	6.5	-	-	-	-	.3	43	26	-	-	-	12	.2	-	-
3	12	62	11.0	7.4	6.6	-	-	-	-	.2	20	22	-	-	-	22	.3	-	-
3	19	62	11.0	7.8	6.7	-	-	-	-	.3	14	20	-	-	-	20	.1	-	-
3	26	62	15.0	7.4	6.7	-	-	-	-	.1	18	24	-	-	-	17	.1	-	-
4	2	62	15.0	6.5	6.5	-	-	-	-	.2	28	44	32	35	-	10	.0	-	-
4	9	62	16.0	6.8	6.7	-	-	-	-	.2	22	22	40	30	-	14	.1	-	-
4	16	62	17.0	6.4	6.5	-	-	-	-	.2	40	105	34	-	-	10	2.5	-	-
4	23	62	20.0	5.8	6.5	-	-	-	-	.2	45	-	34	-	-	27	-	-	-
4	30	62	23.5	4.4	6.4	-	-	-	-	.4	55	20	44	15	-	18	2.7	-	-
5	14	62	24.5	2.6	6.4	-	-	-	-	-	54	16	56	50	25	-	-	-	-
6	10	62	27.5	4.2	6.9	-	-	-	-	-	140	20	68	20	*25	9	.0	349	-
6	18	62	28.0	5.4	7.5	-	-	-	-	-	71	22	60	20	*25	33	.0	192	-
6	25	62	30.0	4.4	6.6	-	-	-	-	-	62	28	52	30	95	22	.0	190	-
7	2	62	31.5	5.8	6.7	-	-	-	-	-	116	28	88	30	40	18	.0	-	-
7	12	62	-	-	-	-	-	-	-	-	188	16	88	15	25	16	.0	428	-
7	16	62	35.5	3.4	6.7	-	-	-	-	.2	181	24	88	10	25	17	.0	410	-
7	23	62	32.0	4.8	6.7	-	-	-	-	-	355	24	140	10	25	17	.1	694	-
7	30	62	30.5	4.6	7.8	-	-	-	-	-	145	108	80	25	600	17	.0	417	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN OUACHITA RIVER
STATION LOCATION OUACHITA RIVER AT
BASTROP, LOUISIANA 85

DATE OF SAMPLE MONTH	DAY	YEAR	TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND 1-HOUR mg/l	CHLORINE DEMAND 24-HOUR mg/l	AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
8	7	62	32.0	6.0	7.7	-	-	-	-	-	232	30	96	-	-	11	.0	484	-
8	20	62	31.0	5.2	6.6	-	-	-	-	-	234	16	96	20	-	13	.0	531	-
9	4	62	30.5	6.4	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	10	62	27.0	6.2	6.7	-	-	-	-	-	138	16	68	15	25	8	.0	320	-
9	17	62	27.0	6.8	6.7	-	-	-	-	-	146	28	84	10	25	12	.0	353	-
9	24	62	-	-	-	-	-	-	-	-	58	28	44	20	*25	15	.0	155	-

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN CLARK FORK-PEND OREILLE RIVER
STATION LOCATION PEND OREILLE RIVER AT
ALBENI FALLS DAM, IDAHO 113

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
5	15	62	2800	0	0	20	0	370	100	1260	990	120	100	71	3	92	2	68	2	57	2												
5	28	62	1100	0	0	20	0	0	0	170	890	270	630	93	1	92	1																
6	13	62	1300	0	0	0	0	80	20	150	1080	20	60	93	1																		
6	27	62	1700	0	0	40	0	20	130	490	990	400	360	93	2	73	1																
7	10	62	400	0	0	0	0	0	0	300	130	40	210	69	1																		
7	31	62	200	0	0	40	0	0	0	80	120	0	40																				
8	13	62	200	0	0	40	0	0	80	0	40	20	20																				
8	31	62	1000	0	130	0	0	0	0	510	340	210	130	68	2	84	1																
9	11	62	6800	0	190	0	0	40	0	1700	4890	80	1160	88	3	68	3	97	3	81	3	92	3	71	2	87	2	73	1	79	1	82	1
9	26	62	00	0	0	0	0	10	0	10	20	0	40																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN CLARK FORK-PEND OREILLE RIVER
STATION LOCATION PEND OREILLE RIVER AT
ALBENI FALLS DAM, IDAHO 113

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)											MICROINVERTEBRATES																		
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA								
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
5	15	62	95	35	92	17	82	10	9	7	31	0	0	6	11	1									2							0	0
5	28	62	95	81	9	6	92	3	46	3	7	150	0	11	11	1									5							0	0
6	13	62	95	64	9	7	46	4	48	4	21	0	0	27	21	2	10	1							1							0	0
6	27	62	95	85	9	4	46	3	47	2	6	0	0	4											3	51	1					0	0
7	10	62	95	69	47	8	46	4	30	3	16	0	10	17	11	1									2							0	0
7	31	62	47	30	95	21	9	8	30	5	36	0	0	188	17	5	11	2	10	2					15	50	2	51	1			0	0
8	13	62	56	22	47	15	95	12	58	7	44	0	0	33	17	3	22	1							14	76	3					0	20
8	31	62	47	40	56	14	25	13	58	12	21	0	0	16	17	2									0							0	0
9	11	62	58	20	95	11	41	7	47	6	56	0	0	45	17	3									27	50	3	76	2	77	1	0	0
9	26	62	58	32	47	13	56	5	25	4	46	0	0	124	17	5	5	1	11	1					6	50	2					0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN CLARK FORK-PEND OREILLE RIVER
STATION LOCATION PEND OREILLE RIVER AT
ALBENI FALLS DAM, IDAHO 113

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
5	15	62	6	25	0	0	0	1	0	1	2	3	12	4	14	5						
5	25	62	6	27	0	0	0	1	0	1	2	6	3	6	5	8						
6	1	62	7	2	0	0	1	1	1	1	16	6	9	6	25	8						
6	8	62	7	9	0	1	0	1	0	1	1	6	6	6	7	8						
6	15	62	7	13	0	1	0	1	0	1	4	3	10	4	14	5						
6	25	62	7	24	0	1	0	1	0	1	4	6	7	6	11	8						
6	29	62	8	6	0	1	0	1	0	1	2	6	8	7	10	9						
7	6	62	10	10	0	0	0	0	0	0	2	6	11	7	13	9						
7	17	62	8	2	0	0	0	1	0	1	3	5	3	6	6	7						
7	20	62	8	7	0	0	0	1	0	1	7	5	11	6	18	7						
7	27	62	9	19	0	0	1	1	1	1	0	6	2	6	2	8						
8	3	62	8	23	0	0	0	1	0	1	1	5	14	7	15	8						
8	13	62	8	31	0	1	0	1	0	1	1	5	6	6	7	7						
8	17	62	9	5	0	0	0	1	0	1	3	5	5	6	8	7						
8	24	62	9	30	0	0	1	1	1	1	8	6	1	6	9	8						
8	31	62	9	18	0	0	0	1	0	1	1	6	12	7	13	9						
9	7	62	9	24	0	0	0	1	0	1	2	6	9	7	11	9						
9	14	62	10	15	0	0	0	1	0	1	1	5	6	6	7	8						
9	21	62	10	18	0	1	1	1	1	1	2	5	10	6	12	8						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN KOOTENAI RIVER
STATION LOCATION PEND OREILLE RIVER AT
ALBENI FALLS DAM, IDAHO 113

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
8	31	62	9	8	5000	74	28	46	1	7	12	2	1	9	0	2	1	1	4

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN CLARK FORK-PEND OREILLE RIVER
STATION LOCATION PEND OREILLE RIVER AT
ALBENI FALLS DAM, IDAHO 113

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
5	25	62	-	-	-	-	-	-	-	-	3	-	-	5	-	17	-	-	-
6	15	62	-	-	-	-	-	-	-	-	4	52	56	5	25	12	-	-	-
6	25	62	-	-	7.9	-	-	-	-	-	4	60	88	0	*25	11	.0	-	-
6	29	62	-	-	8.2	-	-	-	-	-	3	60	76	10	-	-	-	-	-
7	6	62	-	-	-	-	-	-	-	-	3	60	68	5	25	13	.0	-	-
7	17	62	-	-	-	-	-	-	-	-	-	-	-	5	*25	17	.0	-	-
7	20	62	-	-	-	-	-	-	-	-	4	64	80	5	25	13	-	-	-
8	3	62	-	-	8.2	-	-	-	-	-	3	68	72	5	*25	8	-	-	-
8	13	62	-	-	-	-	-	-	-	-	4	72	84	0	-	8	.0	99	-
8	17	62	-	-	-	-	-	-	-	-	2	72	76	5	-	7	.0	57	-
8	24	62	-	-	-	-	-	-	-	-	1	72	72	5	-	13	.0	-	-
8	31	62	-	-	-	-	-	-	-	-	4	60	76	0	-	9	.0	89	-
9	7	62	-	-	-	-	-	-	-	-	4	76	80	0	25	12	.5	105	-
9	14	62	-	-	-	-	-	-	-	-	3	76	100	5	*25	9	.0	97	-
9	21	62	-	-	-	-	-	-	-	-	2	80	76	5	*25	7	.0	85	-
9	28	62	-	-	-	-	-	-	-	-	2	72	84	0	*25	9	.0	105	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Newport, Washington
Data Supplied by U.S. Geological Survey

STATE	Idaho
MAJOR BASIN	Pacific Northwest
MINOR BASIN	Clark Fork-Pend Oreille River
STATION LOCATION	Pend Oreille River at Albeni Falls Dam, Idaho

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	15.000	13.700	16.500	15.500	24.000	23.000	15.700	48.800	77.000	35.100	14.500	5.000
2	15.000	12.000	8.000	15.500	24.000	23.100	13.200	48.300	77.200	35.100	13.600	5.000
3	16.000	11.500	7.000	15.500	24.000	23.100	13.100	48.500	77.400	32.300	14.100	5.000
4	23.800	10.100	9.300	16.300	24.000	23.000	17.000	48.000	77.400	29.900	14.200	6.400
5	26.500	10.000	11.000	15.500	24.100	24.200	20.000	48.100	77.400	28.600	14.100	6.200
6	21.500	11.000	15.900	16.400	24.000	23.000	22.600	47.900	77.200	28.300	14.000	5.000
7	16.700	17.800	16.000	16.400	24.000	23.000	24.000	48.300	76.500	29.700	14.000	7.800
8	16.900	18.000	16.000	16.600	24.000	23.000	24.000	48.600	75.000	30.000	14.000	8.000
9	21.800	18.200	16.000	19.600	20.100	23.100	26.200	48.500	74.000	30.000	13.600	8.000
10	19.900	21.900	17.200	21.500	20.000	22.900	29.400	48.900	72.800	28.000	12.500	8.000
11	22.000	22.000	20.000	19.000	20.000	22.900	29.100	50.200	66.900	28.100	11.900	8.000
12	20.200	21.900	18.100	16.500	20.100	18.600	28.000	51.500	55.800	27.000	11.900	7.900
13	10.100	23.800	12.100	15.000	20.000	16.000	29.000	52.600	51.700	23.800	11.300	8.000
14	7.300	26.900	12.000	14.900	20.000	16.100	30.000	53.000	47.700	20.700	10.500	8.000
15	16.400	27.000	14.000	17.500	20.000	18.000	30.100	52.500	36.700	20.500	10.600	8.000
16	20.100	27.000	14.000	20.000	20.000	16.400	30.100	54.500	35.100	19.200	10.500	8.000
17	26.000	27.000	14.000	18.500	20.000	19.900	33.100	56.600	35.000	18.600	10.500	8.000
18	26.000	27.000	16.800	17.000	20.100	20.000	37.400	61.100	35.400	19.100	10.500	4.200
19	19.100	27.000	20.000	18.900	20.000	18.500	39.000	62.000	32.900	18.100	10.600	4.000
20	17.500	26.900	19.100	21.200	21.900	17.000	39.700	62.200	30.000	17.000	10.500	10.000
21	15.700	27.000	19.100	22.500	25.100	15.500	39.300	62.800	30.000	17.000	10.400	10.100
22	15.000	27.000	20.100	22.500	25.100	14.100	40.000	63.600	29.900	17.000	9.100	9.000
23	17.700	26.900	19.900	22.400	25.000	17.200	40.600	64.700	29.900	17.000	7.300	8.200
24	19.500	27.000	18.000	21.100	25.000	20.000	40.800	66.100	30.000	17.000	7.100	8.000
25	17.300	27.000	18.000	16.400	25.000	20.000	42.100	67.300	30.200	17.000	8.000	9.500
26	16.900	25.000	17.000	19.800	25.100	21.000	43.700	68.600	30.100	17.000	7.900	11.000
27	17.200	26.900	15.100	19.900	24.300	23.100	45.500	69.800	29.800	17.000	7.100	10.400
28	14.900	27.000	15.000	19.900	23.100	24.000	46.800	71.800	30.000	13.800	4.500	10.000
29	13.900	26.900	13.700	19.800		24.100	47.600	73.900	30.000	12.200	4.600	11.300
30	15.000	26.300	17.500	19.900		21.800	48.700	75.300	33.500	12.500	4.700	11.000
31	16.000		16.700	21.000		18.500		76.200		13.700	5.000	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER M'SSOURI BELOW NIOBRARA RIVER
STATION LOCATION PLATTE RIVER ABOVE
PLATTSMOUTH, NEBRASKA 86

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	5	61	10	14	6	4	3	3	9	5	51	13	46	12	97	18						
10	11	61	10	27	2	6	0	2	2	6	40	15	17	11	57	19						
10	18	61	11	15	10	9	11	6	21	11	57	18	29	11	86	21						
10	25	61	11	6	4	5	9	4	13	6	40	14	22	11	62	18						
10	31	61	11	7	8	5	4	3	12	6	29	14	39	12	68	18						
11	21	61	12	4	4	4	6	3	10	5	107	15	86	12	193	19						
11	28	61	12	8	2	3	8	4	10	5	17	15	43	15	60	21						
12	5	61	12	14	1	2	8	4	9	4	14	10	33	12	47	16						
12	18	61	12	28	0	1	5	3	5	3	7	9	26	13	33	16						
12	26	61	1	11	0	1	10	4	10	4	17	9	33	12	50	15						
1	2	62	1	16	1	1	7	4	8	4	14	12	33	15	47	19						
1	9	62	1	18	27	14	8	4	35	15	284	25	35	11	319	27						
1	16	62	1	30	0	1	10	4	10	4	13	9	32	12	45	15						
1	23	62	2	6	1	1	8	4	9	4	1	8	27	12	28	14						
1	30	62	2	12	0	2	5	4	5	4	58	10	56	12	114	16						
2	6	62	2	19	2	2	7	3	9	4	42	11	52	11	94	16						
2	13	62	2	28	1	2	7	4	8	4	36	12	36	12	72	17						
2	20	62	3	8	2	2	5	3	7	4	41	11	49	11	90	16						
2	27	62	3	14	1	1	7	4	8	4	11	8	51	12	62	14						
3	6	62	3	19	0	1	6	4	6	4	22	9	44	12	66	15						
3	13	62	3	27	3	4	6	3	9	5	420	20	135	13	555	24						
3	20	62	4	3	7	5	1	1	8	5	292	42	84	7	376	43						
4	3	62	4	17	30	13	5	3	35	13	109	32	53	11	162	35						
4	10	62	4	24	4	3	6	3	10	4	57	13	54	12	111	17						
4	17	62	5	24	5	3	8	3	13	4	24	19	52	18	76	26						
4	24	62	5	29	8	4	0	2	8	4	15	12	32	14	47	18						
5	1	62	6	5	0	1	10	4	10	4	19	12	38	14	57	18						
5	8	62	6	15	8	5	8	4	16	6	62	18	30	14	92	23						
5	15	62	6	21	0	1	4	3	4	3	20	14	40	17	60	22						
5	22	62	6	27	18	33	2	2	20	33	600	75	48	9	648	76						
5	29	62	8	1	79	64	1	2	80	64	920	142	36	14	956	143						
6	5	62	7	6	11	23	2	2	13	23	427	110	59	17	486	111						
6	12	62	7	10	35	22	1	2	36	22	262	87	65	9	327	87						
6	19	62	7	20	3	5	2	1	5	5	55	16	26	6	81	17						
6	26	62	7	24	4	11	4	3	8	11	158	74	69	10	227	75						
7	3	62	8	6	5	5	5	3	10	6	63	20	59	15	122	25						
7	9	62	7	25	2	4	4	2	6	4	161	24	66	17	227	29						
7	17	62	8	27	15	11	3	2	18	11	208	93	55	10	263	94						
7	24	62	8	21	22	25	4	2	26	25	365	145	62	9	427	145						
7	31	62	8	22	16	12	1	2	17	12	149	45	44	14	193	47						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	NEBRASKA
MAJOR BASIN	MISSOURI RIVER
MINOR BASIN	LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION	PLATTE RIVER ABOVE PLATTSMOUTH, NEBRASKA 86

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
8	7	62	8	28	18	18	2	2	20	18	264	81	60	9	324	81						
8	14	62	9	6	6	7	2	2	8	7	73	56	47	14	120	58						
8	22	62	9	5	5	7	2	4	7	8	113	35	74	16	187	38						
8	28	62	10	1	1	1	1	2	2	2	23	13	46	16	69	21						
9	4	62	9	18	5	8	2	2	7	8	303	67	55	13	358	78						
9	11	62	9	28	13	9	0	1	13	9	164	80	46	17	210	82						
9	18	62	10	15	3	4	0	1	3	4	43	31	26	13	69	36						
9	25	62	10	24	2	2	2	3	4	4	28	15	39	16	67	22						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION PLATTE RIVER ABOVE
PLATTSMOUTH, NEBRASKA 86

DATE OF SAMPLE			ALGAE *(Number per milliliter)*									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE - GREEN		GREEN		FLAGELLATED *(Pigmented)*		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	5	61	22100	0	20	2030	0	1160	0	13350	5510	810	2940	71	6	68	5	99	4	38	4	69	3	97	3	51	3	92	2	91	2	81	2
10	17	61	6200	0	0	580	0	190	0	1780	3620	250	2480	84	7	88	3	38	2	87	1	51	1	92	1								
11	7	61	5700	0	40	390	0	170	20	1590	3480	540	2840	84	4	69	2	92	2	97	2	38	2	88	2	98	1						
11	21	61	7200	20	40	210	0	80	0	1470	5360	290	4260	71	3	97	3	88	2	92	2	98	2	69	1	99	1						
12	5	61	6400	0	90	410	0	450	0	2000	3470	590	2680	71	4	84	3	68	3	88	2	97	2	51	2	69	2	92	1	38	1	87	1
1	2	62	1200	0	0	20	0	40	0	270	910	120	460	84	2																		
1	16	62	1100	0	0	0	0	50	0	200	880	360	340	84	2																		
2	6	62	300	0	0	0	0	20	0	20	290	70	340																				
2	13	62	600	0	0	0	0	20	20	0	510	50	690	87	1																		
3	6	62	600	0	0	0	0	80	0	150	370	0	120																				
4	3	62	500	0	0	0	0	90	0	130	310	250	1520																				
4	17	62	8100	20	0	190	0	890	0	4530	2510	1370	1080	71	5	51	3	88	2	84	2	91	1	97	1	92	1						
5	4	62	86800	3020	40	30100	0	8280	120	20740	24470	8450	5260	71	8	24	7	25	7	88	6	51	6	82	4	38	4	97	4	98	3	57	3
5	15	62	97700	210	8310	45580	420	840	0	21560	20760	12170	8310	24	8	71	7	38	7	17	6	68	6	88	6	92	5	87	4	98	4	97	3
6	5	62	1600	0	0	200	0	70	0	270	1070	160	1610	88	2	84	1	92	1														
6	19	62	8700	40	0	1610	170	1160	80	870	4760	120	410	88	3	84	3	38	3	57	3	71	2	24	2	92	2	51	2	87	2	68	2
7	3	62	36500	300	170	14560	550	660	0	10170	10090	1820	4180	38	6	68	6	24	5	88	5	71	4	92	3	51	3	50	2	84	2	99	2
7	17	62	10600	0	110	570	0	210	0	5380	4330	1480	1370	68	5	71	4	88	4	97	2	98	2	38	2	92	1	51	1	69	1	84	1
8	7	62	6300	0	0	890	230	390	0	1240	3520	290	500	88	3	68	3	38	3	87	2	84	2	97	2	51	2	50	1	74	1	71	1
8	20	62	70300	1990	410	22600	0	2440	0	19040	23810	6000	4550	68	7	38	7	24	5	25	5	51	4	44	4	3	4	29	3	69	3	33	2
9	4	62	19800	0	0	1560	0	150	0	11350	6710	2740	1940	71	6	68	5	88	5	38	3	87	3	91	2	74	2	86	2	24	2	69	1
9	18	62	21600	500	250	9930	0	380	0	8060	2520	9380	5450	38	6	68	5	71	5	88	4	24	4	25	3	69	3	26	3	3	2	51	2

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	NEBRASKA
MAJOR BASIN	MISSOURI RIVER
MINOR BASIN	LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION	PLATTE RIVER ABOVE PLATTSMOUTH, NEBRASKA 086

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	5	61	78	28	46	23	92	6	74	5	38	0	0	0											0							0	0
10	17	61	46	30	71	22	73	6	80	4	38	0	0	0											0							0	0
11	7	61	46	40	92	10	78	9	71	5	36	0	0	0											0							0	0
11	21	61	46	31	78	15	80	8	92	7	39	20	0	0											0							0	0
12	5	61	46	31	78	8	71	8	92	7	46	680	0	0											0							1	0
1	2	62	46	34	71	6	73	5	78	5	50	0	0	0											0							0	0
1	16	62	46	32	71	5	17	5	48	4	54	0	0	0											0							1	0
2	6	62	71	17	46	13	65	11	36	8	51	20	0	0											0							0	0
2	13	62										20	0	0											0							0	0
3	6	62	48	24	78	17	74	8	86	8	43	0	0	0											0							0	0
4	3	62										20	0	0											0							0	0
4	17	62	80	37	45	13	48	11	71	10	29	0	0	0											1							0	1
5	4	62	92	27	45	20	71	20	36	5	28	0	0	1											0							0	0
5	15	62	46	19	82	14	48	13	26	8	46	300	0	13	2	2									1							0	0
6	5	62	71	18	46	15	92	9	79	9	49	70	0	0											0							0	0
6	19	62	46	22	71	12	47	9	92	7	50	120	0	0											0							0	0
7	3	62	71	18	46	18	92	5	26	5	54	0	0	2											2							0	0
7	17	62	46	26	71	12	73	8	78	7	47	0	0	-											-							-	-
8	7	62	46	26	71	8	73	6	26	4	56	0	0	-											-							-	-
8	20	62	26	18	46	14	73	8	56	4	56	0	0	0											0							0	0
9	4	62	82	43	26	20	71	4	72	4	29	0	0	0											0							0	0
9	18	62	26	40	82	33	71	6	46	3	18	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION PLATTE RIVER ABOVE
PLATTSMOUTH, NEBRASKA 86

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	11	61	-	-	-	-	28	-	-	1.6	103	148	212	-	2100	64	.9	470	-
10	17	61	18.0	11.5	-	-	45	-	-	.8	79	184	168	-	800	72	.7	512	-
10	25	61	11.0	11.6	8.0	-	26	-	-	.4	94	176	176	-	260	88	.9	532	-
10	31	61	11.0	10.5	7.5	-	30	-	-	.6	96	164	168	-	300	78	1.0	464	-
11	7	61	6.0	12.7	7.4	-	21	-	-	.9	70	168	164	-	200	64	.8	532	-
11	15	61	6.0	12.7	8.3	-	35	-	-	.6	72	188	176	-	170	90	.8	-	-
11	21	61	5.0	13.3	8.0	-	34	-	-	.7	72	168	176	-	220	88	1.0	474	-
12	5	61	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-
12	18	61	3.0	10.0	7.5	1.8	44	-	-	1.1	167	240	242	5	355	112	1.3	644	-
12	26	61	3.0	10.9	7.7	.8	27	-	-	.8	107	208	232	-	330	121	.9	546	-
1	2	62	4.0	10.5	7.4	-	9-	-	-	1.0	89	184	224	-	40	83	.7	518	-
1	9	62	2.0	11.8	7.6	20.0	97	-	-	1.1	82	208	260	-	640	95	1.4	-	-
1	16	62	3.0	10.7	7.6	1.8	31	-	-	2.0	82	208	240	-	25	103	.8	578	-
1	23	62	2.0	8.6	7.4	1.8	22	-	-	1.9	80	200	168	-	28	96	1.0	518	-
1	30	62	4.0	9.2	7.5	5.4	40	-	-	-	80	168	124	-	96	120	.5	540	-
2	6	62	3.0	12.1	7.6	4.8	16	-	-	1.5	43	132	116	-	208	106	.5	-	-
2	13	62	-	-	7.7	13.8	38	-	-	3.9	71	152	140	-	80	118	.3	542	-
2	19	62	2.8	7.4	8.1	-	113	-	-	.7	27	156	160	-	1304	80	.9	306	-
2	20	62	5.0	13.4	7.0	7.2	27	-	-	1.0	35	172	132	-	141	106	2.2	438	-
2	27	62	-	-	7.3	4.8	31	-	-	1.0	55	228	172	-	76	119	2.0	-	-
3	6	62	4.0	11.3	7.8	6.6	26	-	-	.3	86	212	172	-	40	112	1.0	616	-
3	13	62	4.0	11.2	7.3	6.6	44	-	-	.9	59	144	120	-	271	80	.6	376	-
3	20	62	6.0	-	7.3	13.8	86	-	-	1.0	41	-	88	-	1968	65	.3	350	-
4	3	62	-	-	7.3	4.2	94	-	-	.6	35	156	136	-	670	104	.6	-	-
4	10	62	12.0	10.8	7.5	3.6	47	-	-	.9	47	180	160	-	265	91	.6	448	-
4	24	62	21.0	10.3	7.3	2.0	31	-	-	2.0	61	192	232	-	68	112	.6	540	-
5	1	62	16.0	10.8	8.0	3.0	38	-	-	2.3	65	184	220	-	84	112	1.1	-	-
5	15	62	25.0	8.7	7.3	-	35	-	-	1.2	82	192	208	-	36	80	1.1	598	-
5	22	62	25.0	-	7.8	-	150	-	-	.4	41	128	140	-	1800	48	1.3	322	-
5	29	62	-	-	7.2	21.0	420	-	-	3.2	-	108	108	-	5050	70	.7	290	-
6	5	62	22.0	-	7.6	11.4	124	-	-	7.0	59	148	144	-	1680	54	1.1	270	-
6	12	62	26.0	-	7.2	4.8	121	-	-	2.1	29	132	136	-	1660	53	.9	284	-
6	26	62	26.0	7.2	7.3	6.3	76	-	-	.6	41	156	168	-	623	73	1.0	314	-
7	3	62	26.0	8.3	8.1	1.8	64	-	-	1.0	45	176	172	-	381	55	1.6	378	-
7	10	62	26.0	7.3	7.7	3.6	102	-	-	.1	61	184	176	-	401	61	1.1	402	-
7	17	62	27.0	7.3	7.7	7.8	122	-	-	.0	33	164	160	-	920	48	1.0	278	-
7	24	62	28.0	6.7	7.8	6.9	113	-	-	.0	39	116	160	-	2096	69	1.0	290	-
7	31	62	25.0	7.5	7.5	7.8	87	-	-	.0	75	140	164	-	1060	48	.8	308	-
8	7	62	28.0	6.9	7.7	9.0	108	-	-	.0	59	136	164	-	2520	46	1.4	280	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEBRASKA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER
STATION LOCATION PLATTE RIVER ABOVE
PLATTSMOUTH, NEBRASKA 86

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	14	62	28.0	8.4	8.1	5.6	44	-	-	.3	63	176	160	-	335	51	1.2	404	-
8	20	62	27.0	8.4	7.9	2.4	39	-	-	.3	80	172	172	-	105	69	1.2	450	-
8	28	62	26.0	8.6	8.3	2.4	37	-	-	.5	78	188	196	-	122	42	1.0	432	-
9	4	62	16.0	8.4	8.1	3.3	65	-	-	.2	55	144	164	-	726	28	1.0	334	-
9	11	62	19.0	8.8	7.9	4.8	44	-	-	.2	69	144	160	-	529	40	.8	384	-
9	18	62	24.0	8.6	7.9	3.6	43	-	-	.3	90	164	172	-	109	47	.8	366	-
9	25	62	22.0	9.5	7.9	4.2	47	-	-	.5	90	160	172	-	102	61	.7	346	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at South Bend, Nebraska
Operated by U.S. Geological Survey

STATE	Nebraska
MAJOR BASIN	Missouri River
MINOR BASIN	Lower Missouri below Niobrara River
STATION LOCATION	Platte River above Plattsmouth, Nebraska

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	4.060	3.980	5.180	3.300	5.000	3.300	32.400	6.190	10.300	6.400	8.250	5.820
2	3.710	4.520	4.920	3.400	5.500	3.600	20.400	6.400	9.640	5.920	6.780	4.310
3	3.360	4.740	5.000	3.700	6.000	4.000	15.400	5.300	13.300	6.130	6.190	3.090
4	3.290	4.610	5.140	4.000	6.400	4.500	14.300	5.900	14.600	7.000	9.420	3.000
5	3.400	4.690	4.100	4.100	6.800	5.200	14.300	5.610	10.400	6.610	10.300	3.700
6	3.140	4.960	4.100	4.200	7.000	5.800	12.400	5.000	12.800	6.560	8.990	3.170
7	3.140	4.610	4.500	4.200	6.800	6.200	12.800	4.750	20.400	7.280	7.750	3.040
8	3.140	4.230	4.600	4.100	6.300	6.400	10.200	4.400	31.400	6.720	8.000	3.480
9	2.820	5.000	4.000	3.900	6.000	6.200	10.600	4.000	38.400	5.980	7.050	4.360
10	5.110	4.650	2.500	3.500	5.800	6.000	7.750	3.700	28.000	6.130	7.000	4.850
11	7.660	4.690	1.200	2.900	5.800	5.800	6.880	4.170	21.800	7.280	6.240	4.550
12	6.190	5.000	1.100	3.000	6.000	5.700	6.610	4.260	23.300	7.510	5.510	3.930
13	4.740	4.920	1.000	3.000	6.500	5.700	7.750	3.660	22.600	6.940	4.700	3.480
14	4.310	4.920	1.100	3.000	7.800	5.700	7.750	3.570	21.100	7.940	4.410	3.210
15	4.270	5.050	1.200	2.900	8.700	5.700	6.610	3.210	17.800	8.790	3.790	3.090
16	3.940	5.740	1.500	2.800	11.000	5.700	6.880	2.540	15.200	7.570	3.890	3.260
17	3.980	5.640	1.900	2.800	12.000	5.820	8.720	3.390	12.000	7.570	3.520	3.260
18	3.550	5.050	2.200	2.700	12.000	6.200	7.600	3.520	20.000	7.570	3.260	3.170
19	3.400	5.100	2.500	2.800	11.000	6.900	6.900	3.840	29.000	9.060	3.170	3.130
20	3.590	5.690	2.800	2.900	9.000	8.380	6.290	7.980	25.000	14.800	3.300	3.610
21	3.630	5.790	3.100	3.000	6.500	10.600	6.000	12.600	17.000	15.300	2.590	3.890
22	4.020	6.270	3.300	3.000	5.000	13.100	6.000	16.400	12.500	17.700	2.300	3.980
23	4.020	6.070	3.500	2.900	3.500	17.800	5.870	14.700	11.000	14.200	2.340	3.980
24	4.140	5.320	3.600	3.000	3.100	25.400	5.800	15.600	11.000	10.200	2.800	3.930
25	4.520	5.000	3.700	3.200	3.000	27.500	6.400	10.600	11.000	8.790	2.920	3.980
26	4.390	5.000	3.800	3.300	3.000	46.100	6.300	9.280	10.700	8.250	2.590	3.930
27	4.270	5.230	3.700	3.500	3.000	50.700	6.100	8.790	10.000	6.720	2.460	3.610
28	3.900	5.280	3.600	3.600	3.100	45.400	5.800	10.600	8.200	8.060	2.260	3.610
29	4.140	4.820	3.500	3.800		52.900	6.200	18.500	6.880	8.860	2.020	3.390
30	4.690	5.280	3.400	4.000		43.600	6.200	11.000	7.880	8.990	2.100	3.700
31	4.390		3.300	4.400		35.300		9.060		8.520	7.220	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION POTOMAC RIVER AT
GREAT FALLS, MARYLAND 40

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	16	61	10	30	3358	288	111	177	3	31	29	3	1	24	1	9	9	2	28
12	4	61	12	18	2993	292	66	226	3	18	21	4	4	12	1	5	3	1	15
1	8	62	1	29	3768	256	92	164	4	25	24	2	2	20	0	10	7	2	20
2	26	62	3	18	3186	260	95	165	3	24	26	3	2	20	1	12	7	2	21
4	18	62	5	1	3076	238	91	147	2	23	22	3	2	17	0	10	8	1	25
5	21	62	5	28	3870	219	108	111	10	31	23	2	1	18	2	11	11	2	20
6	18	62	6	25	4281	194	96	98	3	28	24	3	1	18	2	11	9	2	19
7	16	62	7	25	3317	215	74	141	2	20	26	2	1	21	2	7	5	2	12
8	17	62	8	27	4425	178	88	90	4	26	25	1	1	22	1	10	6	3	14
9	17	62	9	26	4170	305	95	210	4	32	24	2	1	20	1	10	5	3	17

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION POTOMAC RIVER AT
GREAT FALLS, MARYLAND 40

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	16	-	-	-	-	-	-	0	5	7	7	7	9						
10	9	61	10	16	0	1	1	1	1	1	0	4	13	6	13	8						
10	23	61	11	2	-	-	-	-	-	-	4	5	17	7	21	9						
10	30	61	11	20	-	-	-	-	-	-	9	4	15	5	24	6						
11	6	61	11	17	-	-	-	-	-	-	18	3	39	5	57	6						
11	13	61	11	24	1	1	1	1	2	1	5	4	24	6	29	8						
11	20	61	11	30	-	-	-	-	-	-	17	6	23	7	40	9						
11	27	61	12	4	-	-	-	-	-	-	51	6	86	8	137	10						
12	4	61	12	14	-	-	-	-	-	-	6	6	44	8	50	10						
12	11	61	12	19	-	-	-	-	-	-	24	6	27	7	51	9						
12	18	61	12	28	-	-	-	-	-	-	20	4	24	5	44	6						
12	25	61	1	5	-	-	-	-	-	-	9	5	16	6	25	8						
1	1	62	1	12	-	-	-	-	-	-	13	6	15	6	28	8						
1	8	62	1	8	1	1	0	0	1	1	36	6	47	5	83	8						
1	15	62	1	31	-	-	-	-	-	-	6	5	14	6	20	8						
1	22	62	1	31	-	-	-	-	-	-	14	6	15	6	29	8						
1	29	62	2	6	-	-	-	-	-	-	1	5	23	5	24	7						
2	5	62	2	14	-	-	-	-	-	-	7	6	0	6	7	8						
2	12	62	2	20	0	1	0	1	0	1	26	4	18	5	44	6						
2	19	62	3	2	-	-	-	-	-	-	17	5	17	6	34	8						
3	5	62	3	14	-	-	-	-	-	-	2	6	9	6	11	8						
3	12	62	3	23	3	2	0	1	3	2	77	5	28	6	105	7						
3	19	62	4	4	-	-	-	-	-	-	8	5	14	6	22	7						
3	26	62	4	9	-	-	-	-	-	-	13	5	9	5	22	7						
4	2	62	4	12	-	-	-	-	-	-	22	7	13	6	35	9						
4	9	62	4	20	8	5	0	1	8	5	174	18	39	6	213	19						
4	16	62	4	30	-	-	-	-	-	-	13	4	19	5	32	6						
4	23	62	5	23	-	-	-	-	-	-	3	5	8	6	11	8						
4	30	62	5	25	-	-	-	-	-	-	3	7	10	8	13	11						
5	7	62	6	18	-	-	-	-	-	-	0	7	7	8	7	11						
5	14	62	6	19	0	1	0	0	0	1	3	6	9	5	12	8						
5	21	62	6	26	-	-	-	-	-	-	5	6	11	7	16	9						
5	27	62	6	29	-	-	-	-	-	-	5	3	22	4	27	5						
6	4	62	7	2	-	-	-	-	-	-	4	5	21	7	25	9						
6	11	62	7	9	0	1	0	1	0	1	0	10	13	7	13	12						
6	18	62	7	16	-	-	-	-	-	-	6	6	9	7	15	9						
6	25	62	7	20	-	-	-	-	-	-	8	3	13	4	21	5						
7	2	62	7	31	-	-	-	-	-	-	4	5	8	6	12	7						
7	9	62	10	2	0	1	1	1	1	1	10	6	10	7	20	9						
7	30	62	8	22	-	-	-	-	-	-	0	17	5	7	5	18						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION POTOMAC RIVER AT
GREAT FALLS, MARYLAND 40

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	7	62	10	8	-	-	-	-	-	-	1	5	11	7	12	9						
8	13	62	8	27	1	1	0	1	1	1	2	2	19	4	21	4						
8	20	62	9	5	-	-	-	-	-	-	0	6	14	7	14	9						
8	27	62	9	17	-	-	-	-	-	-	1	5	17	8	18	9						
9	3	62	9	27	-	-	-	-	-	-	7	6	13	9	20	11						
9	10	62	10	5	0	0	1	1	1	1	5	5	15	7	20	9						
9	17	62	10	16	-	-	-	-	-	-	1	5	13	7	14	8						
9	24	62	10	23	-	-	-	-	-	-	11	5	23	8	34	9						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION POTOMAC RIVER AT
GREAT FALLS, MARYLAND 40

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	200	20	0	60	0	60	0	60	40	20	0																				
10	17	61	6600	20	0	270	0	990	0	5200	120	520	150	68	5	69	3	51	3	71	2	38	1										
11	6	61	1700	0	20	150	0	100	0	1350	120	170	80	71	3	68	2																
11	20	61	100	0	0	0	0	0	0	110	20	0	70																				
12	4	61	1200	0	0	20	0	90	0	450	630	50	20	68	2	87	1																
12	18	61	1600	0	0	0	0	40	0	120	1410	20	480	82	3																		
1	2	62	100	0	0	0	0	0	0	40	20	0	0																				
1	15	62	200	0	0	0	0	0	0	20	200	0	540																				
2	5	62	300	0	0	0	0	0	0	50	220	20	110																				
2	19	62	1800	0	0	0	0	250	0	70	1520	160	270	92	3	82	2	51	1	88	1												
3	5	62	700	0	0	0	0	0	0	40	620	0	300																				
3	19	62	400	0	20	0	0	20	0	70	250	20	420																				
4	2	62	500	0	0	0	0	0	0	40	410	0	100	92	1																		
4	16	62	600	0	0	0	0	70	0	70	420	0	690	87	1																		
5	7	62	1500	0	0	120	0	130	20	120	1140	0	120	92	2	87	1	88	1														
5	21	62	29900	40	300	2190	0	130	170	25620	1480	5490	760	71	8	68	4	24	2	81	2	38	2	40	2	17	1	44	1	88	1	25	1
6	4	62	9700	20	340	1650	0	440	110	6580	530	990	460	68	6	71	3	38	2	40	2	17	2	51	1	30	1	57	1	92	1		
6	18	62	800	0	0	290	0	410	0	80	40	40	0	57	2																		
7	2	62	22500	1560	80	12240	0	630	590	5570	1820	1600	420	68	6	38	5	24	5	40	5	10	3	88	3	44	3	62	2	45	2	3	2
7	16	62	4700	250	40	2530	0	0	0	1440	460	340	130	68	4	38	3	40	2	26	1	31	1	36	1	79	1						
8	6	62	3200	250	0	660	0	330	0	1530	460	750	0	71	3	68	3	38	1	51	1	88	1	3	1	30	1						
8	20	62	1900	0	0	610	0	0	0	970	340	840	130	68	3	88	1	40	1	44	1												
9	4	62	3100	170	0	760	0	130	0	1730	340	1010	380	68	4	38	2	26	1	71	1												
9	17	62	1100	170	0	350	0	80	0	290	170	290	40	38	1	3	1	68	1														

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION POTOMAC RIVER AT
GREAT FALLS, MARYLAND 040

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	23	52	27	33	26	4	16	3	8	0	0	0											0							0	0
10	17	61	23	48	27	19	82	13	26	7	13	0	0	0											0							0	0
11	6	61	82	18	23	18	27	12	26	7	45	0	0	0											0							0	0
11	20	61	26	13	23	11	27	7	82	7	62	20	0	3											0							0	0
12	4	61	36	16	64	8	26	7	65	7	62	110	0	1											0							0	0
12	18	61	36	60	62	13	92	4	32	3	20	20	0	1											0							0	0
1	2	62	64	15	36	10	71	8	16	5	62	0	0	0											0							0	0
1	15	62	36	19	92	14	16	13	62	8	46	0	0	1											0							0	0
2	5	62	36	18	92	9	70	9	64	9	55	20	0	1											0							0	0
2	19	62	92	29	36	27	93	17	71	5	22	0	0	0											0							0	0
3	5	62	16	17	36	10	62	8	64	6	59	0	0	0											0							0	0
3	19	62	92	19	36	18	71	11	62	11	41	70	0	0											0							0	4
4	2	62	92	10	16	7	36	6	93	5	72	0	0	1											0							0	0
4	16	62	92	11	62	10	64	9	36	9	61	50	0	0											0							0	1
5	7	62	92	23	16	7	65	5	26	4	61	20	0	3											0							0	0
5	21	62	82	88	28	5	31	2	27	1	4	40	0	44	2	3	15	2	6	1					0							0	2
6	4	62	26	26	27	23	82	15	23	8	28	20	0	0											0							0	0
6	18	62	26	50	27	11	82	5	16	4	30	64620	0	0											0							0	0
7	2	62	26	37	28	30	27	15	70	10	8	0	0	6											0							0	0
7	16	62	27	44	26	25	16	4	92	4	23	0	0	16	15	2									1							0	0
8	6	62	82	54	23	27	27	9	26	6	4	0	0	18	20	1									0							0	0
8	20	62	23	44	27	24	26	22	82	4	6	0	0	9	15	1									3	50	1					0	0
9	4	62	27	60	26	11	16	5	82	2	22	0	0	58	18	3	22	2							3	50	1					0	0
9	17	62	23	26	27	16	26	13	15	13	32	0	0	4											0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATIONPOTOMAC RIVER AT
GREAT FALLS, MARYLAND 40

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	20.6	8.0	8.3	1.6	17	3.0	5.0	.0	14	104	140	7	8	36	.2	198	-
10	9	61	18.9	8.2	8.2	.4	16	1.6	4.3	.0	11	109	140	10	9	35	.2	192	110
10	17	61	15.0	9.2	8.4	.8	19	2.7	4.9	.0	16	103	142	7	14	40	.1	219	-
10	23	61	15.0	8.4	8.1	1.4	13	1.9	5.5	.0	15	94	138	6	18	38	.1	258	500
10	30	61	15.0	9.6	8.2	2.5	15	1.6	5.8	.0	15	105	144	10	20	34	.1	216	400
11	6	61	20.0	7.6	8.2	1.0	13	1.9	3.5	.0	15	105	140	11	10	40	.1	243	170
11	13	61	11.0	9.4	8.1	1.4	15	2.1	6.0	.0	11	95	126	12	10	30	.1	170	71
11	20	61	4.5	10.2	8.4	1.2	15	1.6	4.0	.0	20	98	132	6	8	33	.2	195	*20
11	27	61	9.4	9.6	8.3	.8	17	2.0	4.6	.1	10	85	116	9	20	27	.1	155	520
12	4	61	7.2	12.0	8.6	2.0	14	1.4	3.7	.1	16	94	132	7	10	34	.1	160	-
12	11	61	2.2	12.8	8.6	2.0	17	1.5	3.5	.1	13	89	134	8	10	38	.2	174	140
12	18	61	1.1	12.4	8.1	2.4	19	1.8	5.0	.1	13	65	102	12	35	33	.1	143	-
12	27	61	2.2	11.8	8.0	.5	14	2.0	3.6	.1	10	48	80	7	25	26	.1	100	-
1	2	62	1.1	12.2	7.9	1.8	-	-	-	-	8	61	96	6	12	27	.1	113	-
1	8	62	2.2	11.0	7.6	6.4	35	1.7	8.7	.2	8	44	56	22	180	26	.0	114	19000
1	15	62	1.1	13.4	7.8	2.8	20	2.2	4.8	.1	6	43	72	8	23	27	.1	132	-
1	22	62	2.2	12.0	7.8	2.2	17	2.4	4.8	.2	7	60	92	7	17	28	.1	135	950
1	29	62	1.1	10.8	7.9	1.0	16	1.4	2.8	.1	16	57	88	4	15	26	1.2	144	60
2	5	62	2.8	12.0	8.0	1.8	11	1.1	2.2	.1	12	55	96	5	13	27	.2	148	-
2	12	62	.6	11.4	8.1	3.6	14	.8	2.5	.1	11	60	98	5	12	28	.2	151	*20
2	19	62	3.3	12.8	8.1	2.8	16	1.6	4.4	.1	9	53	82	5	15	26	.4	128	20
2	26	62	2.2	10.2	7.6	5.6	44	2.2	6.1	.2	15	37	62	14	280	27	.2	116	10000
3	5	62	3.3	12.2	7.7	4.0	16	2.1	5.3	.1	6	36	68	8	32	23	.1	122	4800
3	12	62	4.4	11.6	7.7	2.8	-	-	-	-	10	36	64	-	105	23	.1	110	-
3	19	62	5.5	11.8	7.8	2.6	17	1.0	6.5	.1	8	39	68	7	40	24	.1	103	-
3	26	62	7.7	10.1	7.6	1.0	21	1.5	3.5	.1	8	35	56	9	65	23	.1	84	6000
4	2	62	11.7	11.6	7.8	4.4	19	-	-	.1	4	43	74	10	40	24	.1	105	-
4	9	62	12.2	9.2	7.5	.4	36	2.6	8.0	.1	7	42	74	20	200	26	1.2	108	15000
4	16	62	8.3	11.0	7.8	2.0	17	3.0	4.9	.1	8	42	60	10	40	26	.2	100	2500
4	23	62	12.9	9.2	7.6	1.0	17	1.5	3.3	.1	5	49	80	5	15	25	.2	120	750
4	30	62	22.2	7.6	8.3	1.4	20	2.0	3.7	.0	5	61	96	10	12	26	.2	126	50
5	7	62	20.0	7.8	7.8	-	16	1.9	5.5	.1	5	52	76	8	20	25	.1	117	2200
5	14	62	17.7	11.0	8.7	1.2	17	1.6	4.5	.1	7	67	94	7	11	25	.1	146	-
5	21	62	26.5	8.2	8.7	1.5	15	2.4	5.8	.0	14	65	100	5	11	27	.1	148	-
5	28	62	24.5	5.6	7.9	2.2	20	1.8	7.0	.1	7	64	100	9	66	28	.1	108	9500
6	4	62	25.0	6.8	8.0	.2	15	1.6	3.1	.1	7	71	100	7	23	27	.2	140	-
6	11	62	27.1	6.4	8.8	2.0	16	1.3	6.2	.1	6	76	108	3	18	28	.1	172	-
6	18	62	27.2	6.2	7.9	1.0	14	.5	5.2	.1	6	62	112	7	23	30	.1	150	200
6	25	62	27.2	6.6	8.7	1.8	14	2.7	5.6	.1	6	77	120	5	17	27	.1	151	1700

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION POTOMAC RIVER AT
GREAT FALLS, MARYLAND 40

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	2	62	27.2	6.6	9.0	2.0	14	2.1	2.9	-	9	69	114	-	15	31	.2	172	300
7	9	62	24.4	6.0	8.6	-	12	2.4	4.7	.1	9	83	128	6	18	38	.1	184	100
7	16	62	21.0	-	8.4	-	12	1.4	4.2	.1	11	77	126	5	14	38	.1	170	300
7	23	62	21.0	5.8	8.5	2.4	18	1.9	2.5	.1	8	76	134	5	14	38	.1	172	*50
7	30	62	21.0	5.4	8.1	1.6	17	1.3	3.1	.2	13	69	114	6	14	37	.2	146	*50
8	6	62	28.3	5.8	8.1	2.6	15	2.1	4.8	.1	8	76	110	4	9	55	.2	153	*50
8	13	62	28.8	7.2	8.3	1.8	17	2.1	5.6	.1	14	92	124	4	10	40	.1	202	*50
8	20	62	27.2	6.2	8.1	2.2	14	2.5	5.7	.2	14	86	128	4	15	40	.1	193	200
8	27	62	25.6	5.2	8.2	.9	15	1.7	5.1	.2	14	95	132	3	8	43	.1	206	700
9	3	62	25.6	5.0	8.0	3.3	-	-	-	-	-	91	130	4	8	43	.1	213	-
9	10	62	22.8	6.6	8.4	2.4	19	2.0	6.6	.1	16	92	114	4	17	41	.1	191	400
9	17	62	23.3	6.0	8.0	1.2	17	2.4	4.8	.1	15	91	124	4	14	65	.1	220	*50
9	24	62	18.3	7.0	8.2	1.2	18	1.4	4.0	.1	18	93	130	5	15	51	.1	227	*50

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Washington, D.C.
Operated by U.S. Geological Survey

STATE	Maryland
MAJOR BASIN	North Atlantic
MINOR BASIN	Potomac River
STATION LOCATION	Potomac River at Great Falls, Maryland

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	1.690	2.430	3.870	5.600	6.180	78.900	22.000	9.730	8.000	3.370	2.190	1.120
2	1.540	2.310	3.590	5.500	5.940	64.100	22.500	11.300	7.200	2.970	1.960	1.160
3	1.440	2.270	3.280	5.400	6.000	43.100	23.700	13.100	6.900	2.800	1.810	1.260
4	1.440	2.310	3.060	5.020	5.580	32.300	22.400	21.400	6.600	2.970	1.730	1.220
5	1.500	2.310	3.060	5.020	5.400	24.300	19.500	20.700	5.880	3.100	1.770	1.330
6	1.580	2.190	2.760	6.000	5.400	21.600	17.400	16.200	7.200	2.970	1.810	1.500
7	1.580	2.470	2.720	12.900	5.290	19.900	16.600	13.200	7.500	2.970	1.730	1.610
8	1.580	3.150	2.470	22.900	6.120	17.800	21.900	11.600	6.780	3.690	1.580	1.880
9	1.580	3.280	2.470	33.800	6.900	16.400	37.700	10.600	7.620	4.060	1.690	1.960
10	1.540	2.930	2.760	28.900	6.600	15.400	35.500	9.800	6.840	3.410	1.880	1.960
11	1.540	3.280	2.630	19.200	5.880	15.300	30.600	9.240	5.580	2.970	2.040	1.770
12	1.650	3.970	3.410	13.400	5.460	27.800	27.400	9.100	5.020	2.840	2.150	1.650
13	1.690	3.640	4.010	10.200	5.070	49.500	35.100	8.710	4.960	2.890	2.150	1.540
14	1.610	3.320	4.250	8.710	5.180	78.400	50.700	8.190	5.120	2.630	2.190	1.400
15	1.730	3.150	9.300	7.930	4.800	82.400	48.500	7.860	9.990	2.680	2.150	1.440
16	1.580	3.010	11.600	8.520	5.070	66.600	39.200	7.860	13.200	2.720	1.960	1.360
17	1.540	2.890	9.240	9.380	5.700	55.300	31.300	8.000	10.500	2.760	1.880	1.330
18	1.540	2.760	10.000	9.100	6.300	47.100	26.100	7.800	8.120	2.800	1.730	1.260
19	1.580	2.760	10.100	9.310	6.720	42.300	22.800	7.380	6.840	2.720	1.650	1.260
20	1.500	2.840	15.000	8.380	6.900	40.000	20.400	7.860	6.840	3.150	1.610	1.220
21	1.810	2.760	24.800	7.260	7.560	41.000	19.300	7.440	7.620	3.590	1.470	1.220
22	1.960	2.630	19.200	6.600	8.450	67.300	18.100	6.660	6.000	3.460	1.440	1.190
23	2.350	2.720	14.700	6.420	9.450	114.000	16.800	6.840	5.940	3.190	1.610	1.190
24	10.200	3.230	12.000	6.540	12.500	99.500	15.100	8.190	5.760	3.100	1.690	1.190
25	7.200	3.280	10.200	6.660	28.100	64.600	13.900	7.620	5.760	2.930	1.540	1.260
26	6.240	3.460	8.580	7.680	43.000	49.300	13.200	6.960	5.180	2.680	1.500	1.220
27	4.700	3.230	7.500	8.580	51.100	40.900	12.400	10.100	4.450	2.430	1.400	1.360
28	3.920	3.320	7.020	8.000	65.200	33.400	11.500	9.240	4.350	2.150	1.300	1.400
29	3.410	4.160	6.540	7.260		28.500	10.800	8.450	3.690	2.040	1.190	1.400
30	3.150	4.250	6.060	7.200		24.500	10.200	7.740	3.370	2.040	1.120	1.400
31	2.800		5.800	6.720		21.500		7.740		2.150	1.050	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION POTOMAC RIVER AT
WILLIAMSPORT, MARYLAND 41

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	2	61	10	11	5804	153	68	85	2	16	20	1	1	17	1	8	8	2	12
11	6	61	11	14	5240	133	35	98	1	9	14	1	1	11	1	4	1	1	5
1	1	62	1	9	4436	163	42	121	2	11	13	1	1	10	1	4	2	0	10
2	5	62	2	13	3599	197	73	124	5	18	20	2	2	15	1	8	6	2	14
3	5	62	3	14	3190	225	67	158	5	16	15	2	1	10	2	8	5	1	17
4	2	62	4	9	4682	170	55	115	4	14	12	2	1	8	1	6	4	1	14
4	30	62	5	7	4610	188	90	98	3	24	20	2	1	16	1	8	9	2	24
6	4	62	6	12	5132	141	69	72	4	19	16	1	1	12	2	8	7	1	14
7	6	62	7	14	5034	165	70	95	1	15	26	1	1	22	2	8	6	1	13
8	6	62	8	14	5072	176	78	98	2	22	23	1	1	20	1	9	8	2	12

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	MARYLAND
MAJOR BASIN	NORTH ATLANTIC
MINOR BASIN	POTOMAC RIVER
STATION LOCATION	POTOMAC RIVER AT WILLIAMSPORT, MARYLAND 41

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA							DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL					ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±		MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	14	-	-	-	-	-	-	5	4	6	7	11	8							
10	9	61	10	30	0	0	0	1	0	1	4	4	23	6	27	7							
10	16	61	10	25	-	-	-	-	-	-	1	5	10	7	11	9							
10	23	61	11	2	-	-	-	-	-	-	2	5	21	8	23	9							
11	6	61	11	21	-	-	-	-	-	-	4	5	6	7	10	9							
11	13	61	11	28	0	0	0	1	0	1	1	5	14	7	15	9							
11	20	61	12	1	-	-	-	-	-	-	16	6	31	7	47	9							
11	27	61	12	7	-	-	-	-	-	-	65	7	76	8	141	11							
12	4	61	12	12	0	1	0	1	0	1	9	4	22	5	31	6							
12	11	61	12	19	-	-	-	-	-	-	11	6	13	7	24	9							
12	18	61	1	4	0	1	0	1	0	1	21	6	15	6	36	8							
1	2	62	1	12	-	-	-	-	-	-	13	6	13	6	26	8							
1	8	62	1	19	1	1	0	1	1	1	32	6	17	7	49	9							
1	15	62	1	29	-	-	-	-	-	-	28	6	20	6	48	8							
1	22	62	2	1	-	-	-	-	-	-	18	5	13	6	31	7							
1	29	62	2	8	-	-	-	-	-	-	11	4	8	4	19	6							
2	5	62	2	14	-	-	-	-	-	-	16	5	9	6	25	8							
2	12	62	2	21	0	1	0	1	0	1	17	4	51	5	68	6							
2	19	62	3	2	-	-	-	-	-	-	60	7	25	7	85	10							
2	26	62	3	12	-	-	-	-	-	-	65	10	19	6	84	12							
3	5	62	3	16	-	-	-	-	-	-	0	5	6	6	6	8							
3	12	62	3	26	0	1	1	1	1	1	21	4	13	5	34	6							
3	19	62	3	30	-	-	-	-	-	-	3	3	1	4	4	5							
3	26	62	4	5	-	-	-	-	-	-	4	5	5	5	9	7							
4	2	62	4	13	-	-	-	-	-	-	12	6	13	6	25	8							
4	9	62	4	24	0	1	0	1	0	1	13	5	13	5	26	7							
4	16	62	4	30	-	-	-	-	-	-	12	6	16	6	28	8							
4	23	62	9	18	-	-	-	-	-	-	2	4	5	5	7	6							
4	30	62	6	25	-	-	-	-	-	-	0	4	19	6	19	7							
5	14	62	6	21	0	0	0	1	0	1	0	10	10	6	10	12							
5	21	62	6	26	-	-	-	-	-	-	2	5	5	6	7	8							
5	28	62	6	29	-	-	-	-	-	-	8	5	31	7	39	9							
6	11	62	6	11	0	1	0	0	0	1	4	5	11	6	15	7							
6	18	62	7	10	-	-	-	-	-	-	6	5	15	7	21	9							
6	25	62	7	26	-	-	-	-	-	-	14	6	2	8	16	10							
7	23	62	8	15	0	1	0	1	0	1	0	14	14	7	14	16							
7	30	62	8	21	-	-	-	-	-	-	0	5	12	7	12	8							
8	6	62	8	27	-	-	-	-	-	-	0	2	8	3	8	4							
8	13	62	8	23	0	0	0	0	0	0	0	6	14	7	14	9							
8	20	62	9	5	-	-	-	-	-	-	0	5	13	8	13	9							
8	27	62	9	26	-	-	-	-	-	-	4	7	7	10	11	12							

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION POTOMAC RIVER AT
WILLIAMSPORT, MARYLAND 41

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
9	4	62	10	1	-	-	-	-	-	-	6	5	19	8	25	9						
9	10	62	10	12	-	-	-	-	-	-	3	5	23	8	26	9						
9	17	62	10	13	-	-	-	-	-	-	5	5	18	8	23	9						
9	24	62	10	19	-	-	-	-	-	-	12	6	12	9	24	11						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION POTOMAC RIVER AT
WILLIAMSPORT, MARYLAND 41

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	100	40	0	0	0	0	0	40	60	20	40																				
10	16	61	200	0	0	0	0	20	0	80	60	0	40																				
11	6	61	200	0	0	0	0	0	0	40	210	20	0																				
11	20	61	200	0	0	0	0	40	0	0	120	0	0																				
12	4	61	300	0	0	0	0	80	0	80	150	0	80																				
12	18	61	500	0	20	0	0	40	0	20	410	0	150																				
1	2	62	200	0	0	0	0	0	0	0	160	0	50																				
1	15	62	200	0	0	20	0	20	0	20	140	0	90																				
2	5	62	100	0	0	0	0	0	0	20	120	0	0																				
2	19	62	100	0	0	0	0	0	0	0	140	0	0																				
3	5	62	500	0	0	20	0	60	0	0	460	0	100	82	1																		
3	19	62	200	0	0	0	0	0	20	0	180	0	50																				
4	2	62	400	0	0	0	0	0	0	20	370	0	20																				
4	16	62	1100	0	0	70	0	0	50	430	560	70	290	68	1	92	1																
5	7	62	900	0	0	20	0	0	0	20	830	20	80	81	1	92	1																
5	21	62	7900	0	130	550	0	0	0	4900	2360	130	590	68	5	92	4	71	1	88	1												
6	4	62	3000	0	110	170	0	20	0	1940	720	250	720	68	4																		
6	18	62	1400	20	130	190	0	0	0	490	530	190	300	68	2																		
7	2	62	200	0	0	0	0	0	0	40	130	0	40																				
7	16	62	200	0	0	0	0	0	0	40	210	0	40																				
8	6	62	500	0	80	0	0	0	40	170	250	80	250																				
8	20	62	500	0	80	0	0	0	0	120	290	40	0																				
9	4	62	300	0	10	40	0	0	0	180	40	10	40																				
9	24	62	200	0	10	30	0	80	0	20	70	10	70																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MARYLAND

MAJOR BASIN NORTH ATLANTIC

MINOR BASIN POTOMAC RIVER

STATION LOCATION POTOMAC RIVER AT

WILLIAMSPORT, MARYLAND 041

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																				
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	2	32	16	31	52	4	65	3	30	0	0	3											0							0	0
10	16	61	2	36	16	30	92	3	58	2	29	0	0	1											0							0	0
11	6	61	36	21	2	14	16	10	45	10	45	100	0	1											1							0	0
11	20	61	36	37	2	11	45	8	16	6	38	20	0	0											0							0	0
12	4	61	36	69	45	9	64	3	71	2	17	0	0	1											0							0	0
12	18	61	36	15	2	8	64	8	16	6	63	0	0	0											1							3	0
1	2	62	36	22	64	14	16	14	92	7	43	0	0	0											0							2	0
1	15	62	16	14	36	10	31	10	92	8	58	0	0	1											0							0	0
2	5	62	36	25	16	10	51	8	52	5	52	0	0	0											0							0	0
2	19	62	51	14	36	11	92	7	62	6	62	70	0	0											0							0	0
3	5	62	36	27	92	20	33	7	45	6	40	0	0	0											0							2	0
3	19	62	36	24	33	11	92	8	16	6	51	20	0	0											1							0	0
4	2	62	92	20	36	17	16	7	31	7	49	20	0	0											0							0	0
4	16	62	92	28	36	9	33	9	31	7	47	50	0	1											0							1	0
5	7	62	92	26	33	11	2	8	31	8	47	0	0	0											0							1	0
5	21	62	92	40	27	19	67	6	33	5	30	60	0	8	6	1									0							1	0
6	4	62	2	14	92	14	16	9	26	8	55	0	0	0											1							0	0
6	18	62	92	28	16	16	33	10	62	8	38	0	0	0											0							0	0
7	2	62	16	40	2	5	92	4	70	3	48	0	0	3											0							0	0
7	16	62	16	30	2	10	64	9	26	8	43	0	0	16	15	2									0							1	0
8	6	62	16	24	2	21	64	7	71	4	44	40	0	7											0							0	0
8	20	62	16	42	2	17	64	4	65	4	33	0	0	32	15	3									6	50	1	76	1			0	0
9	4	62	2	40	16	15	65	10	64	6	29	0	0	30	15	3									3	50	1					0	0
9	24	62	2	29	16	14	92	11	36	8	38	0	0	32	11	2	17	1	15	1					6	50	1	76	1			0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION POTOMAC RIVER AT
WILLIAMSPORT, MARYLAND 41

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	130
10	4	61	15.0	7.9	7.8	2.5	-	-	-	-	-	80	140	5	1	-	-	-	-
10	9	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230
10	11	61	17.0	-	8.3	-	-	-	-	-	-	70	132	5	1	-	-	-	-
10	12	61	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-
10	16	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	330
10	18	61	14.0	8.5	7.9	.8	-	-	-	-	-	88	136	5	1	-	-	-	-
10	24	61	14.0	-	8.3	-	-	-	-	-	-	76	122	5	4	-	-	-	-
11	1	61	12.0	8.8	7.6	1.1	-	-	-	-	-	72	104	5	8	-	-	140	-
11	7	61	14.4	-	7.9	-	-	-	-	-	-	82	126	5	8	-	-	-	-
11	13	61	-	-	-	-	-	-	-	-	-	-	-	-	-	42	.1	-	60
11	14	61	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-
11	15	61	9.0	10.0	7.7	2.6	-	-	-	-	-	82	106	5	10	-	-	96	-
11	20	61	-	-	-	-	-	-	-	-	-	-	-	-	-	39	.0	172	46
11	21	61	7.2	-	7.9	-	-	-	-	-	-	78	114	5	8	-	-	-	-
11	27	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220
11	28	61	5.6	-	7.9	-	-	-	-	-	-	84	138	5	8	-	-	-	-
12	4	61	-	-	-	-	-	-	-	-	11	-	-	-	-	42	.0	-	80
12	6	61	4.0	11.6	7.7	1.5	-	-	-	-	-	72	96	20	10	-	-	80	-
12	11	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47
12	12	61	3.3	-	7.9	-	-	-	-	-	-	70	108	5	10	-	-	-	-
12	18	61	-	-	-	-	-	-	-	-	6	-	-	-	-	28	.1	-	-
1	2	62	-	-	-	-	-	-	-	-	8	-	-	-	-	33	-	-	-
1	8	62	-	-	-	-	-	-	-	-	10	-	-	-	-	32	-	-	660
1	9	62	3.3	-	7.2	-	21	-	-	-	-	34	86	-	140	-	-	-	-
1	15	62	-	-	-	-	-	-	-	-	5	-	-	-	-	28	-	-	200
1	17	62	1.1	-	7.3	-	-	-	-	-	-	44	80	5	12	-	-	-	-
1	22	62	-	-	-	-	-	-	-	-	6	-	-	-	-	34	.1	-	200
1	23	62	1.1	-	7.3	-	-	-	-	-	-	46	76	5	12	-	-	-	-
1	29	62	-	-	-	-	-	-	-	-	6	-	-	-	-	29	.0	97	110
1	30	62	1.7	-	7.3	-	-	-	-	-	-	40	72	5	8	-	-	-	-
2	5	62	-	-	-	-	-	-	-	-	6	-	-	-	-	38	-	-	7
2	13	62	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-
2	14	62	1.1	-	7.4	-	-	-	-	-	-	36	70	5	12	-	-	-	-
2	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60
2	22	62	1.7	-	7.4	-	-	-	-	-	-	42	72	5	15	-	-	-	-
2	27	62	3.9	-	7.1	-	-	-	-	-	-	28	48	20	140	-	-	-	-
3	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	330
3	6	62	1.7	-	7.3	-	-	-	-	-	-	30	58	5	6	-	-	-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MARYLAND

MAJOR BASIN NORTH ATLANTIC

MINOR BASIN POTOMAC RIVER

STATION LOCATION POTOMAC RIVER AT
WILLIAMSPORT, MARYLAND 41

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
3	12	62	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	85
3	13	62	3.9	-	7.2	-	-	-	-	-	-	50	26	20	160	-	-	-	-
3	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	480
3	21	62	5.6	-	7.2	-	-	-	-	-	-	28	50	10	30	-	-	-	-
3	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1500
4	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170
4	4	62	9.0	11.4	7.2	.6	-	-	-	-	-	40	58	30	12	-	-	-	-
4	9	62	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
4	10	62	10.6	-	7.2	-	-	-	-	-	-	26	60	15	25	-	-	-	-
4	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240
4	17	62	7.8	-	7.3	-	-	-	-	-	-	34	58	5	12	-	-	-	-
4	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
4	24	62	12.8	-	7.4	-	-	-	-	-	-	38	70	20	8	-	-	-	-
4	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86
5	2	62	20.0	-	7.4	-	-	-	-	-	-	50	82	10	10	-	-	-	-
5	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	340
5	8	62	17.8	-	7.3	-	-	-	-	-	-	38	76	15	8	-	-	-	-
5	14	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220
5	15	62	17.2	-	7.5	-	-	-	-	-	-	50	84	5	12	-	-	-	-
5	21	62	20.0	9.0	7.8	1.0	-	-	-	-	-	54	78	10	10	-	-	-	230
5	22	62	23.3	-	7.7	-	-	-	-	-	-	52	86	5	8	-	-	-	-
6	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	570
6	6	62	23.0	-	7 -	-	-	-	-	-	-	52	88	20	8	-	-	-	-
6	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	630
6	12	62	23.9	-	7.7	-	-	-	-	-	-	52	80	5	8	-	-	-	-
6	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	33	-	-	120
6	20	62	25.0	8.3	7.7	1.0	-	-	-	-	-	46	86	5	10	-	-	-	-
6	26	62	25.0	-	7.7	-	-	-	-	-	-	58	96	5	12	-	-	-	-
7	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	420
7	3	62	24.4	-	7.7	-	-	-	-	-	-	58	102	5	4	-	-	-	-
7	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40
7	10	62	25.0	-	7.8	-	-	-	-	-	-	64	132	5	2	-	-	-	-
7	16	62	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	470
7	17	62	23.3	-	8.0	-	-	-	-	-	-	70	112	5	6	-	-	-	-
7	23	62	-	-	-	-	-	-	-	-	13	-	-	-	-	66	-	-	250
7	25	62	25.0	-	8.0	1.3	-	-	-	-	-	78	130	5	8	-	-	206	-
7	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30
8	1	62	25.0	8.2	8.0	1.0	-	-	-	-	-	70	130	10	6	-	-	190	-
8	6	62	-	-	-	-	-	-	-	-	14	-	-	-	-	62	.0	-	80

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATIONPOTOMAC RIVER AT
WILLIAMSPORT, MARYLAND 41

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	7	62	25.6	-	8.0	-	-	-	-	-	-	72	138	5	8	-	-	-	-
8	13	62	-	-	-	-	-	-	-	-	18	-	-	-	-	60	-	-	100
8	14	62	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-
8	15	62	22.0	8.7	7.9	.8	-	-	-	-	-	72	138	10	3	-	-	188	-
8	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350
8	22	62	23.9	-	8.3	-	-	-	-	-	-	76	145	5	4	-	-	-	-
8	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	87
8	28	62	24.4	-	7.9	-	-	-	-	-	-	86	156	5	4	-	-	-	-
9	4	62	22.8	-	7.9	-	-	-	-	-	-	72	156	5	4	-	-	-	-
9	10	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
9	11	62	22.2	-	8.4	-	-	-	-	-	-	86	154	5	2	-	-	-	-
9	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	530
9	19	62	19.0	7.0	7.7	.6	-	-	-	-	-	70	142	5	2	-	-	262	-
9	24	62	-	-	-	-	-	-	-	-	11	-	-	-	-	60	.0	215	100
9	25	62	18.3	-	8.2	-	-	-	-	-	-	82	144	5	4	-	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Williamsport, Maryland
Operated by U.S. Geological Survey

STATE Maryland
MAJOR BASIN North Atlantic
MINOR BASIN Potomac River
STATION LOCATION Potomac River at Williamsport, Maryland

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.816	1.040	1.780	2.860	3.770	59.400	12.200	5.700	4.900	1.480	1.100	.582
2	.762	1.000	1.600	2.650	3.810	41.300	11.800	5.930	4.500	1.460	.922	.641
3	.756	1.000	1.450	2.570	3.500	27.000	12.500	10.500	4.400	1.450	.914	.576
4	.836	.934	1.420	2.600	3.170	18.700	11.400	14.800	3.840	1.330	.890	.630
5	.896	.941	1.320	2.580	3.150	14.300	10.200	11.900	3.020	1.340	.932	.681
6	.830	1.200	1.300	3.050	3.210	12.600	9.340	9.160	3.900	1.400	.844	.852
7	.810	1.430	1.150	4.630	3.930	11.400	9.150	7.680	4.020	2.040	.732	1.120
8	.810	1.470	1.080	8.800	4.690	9.950	16.900	6.830	5.080	2.670	.898	1.120
9	.770	1.260	1.150	19.500	4.730	9.290	25.000	6.200	5.110	2.290	.985	1.170
10	.856	1.190	1.100	14.300	4.050	8.940	20.500	5.720	3.970	1.780	1.130	1.080
11	.996	2.220	1.060	9.610	3.590	8.290	17.500	5.630	3.250	1.450	1.220	1.010
12	.968	1.970	1.200	6.350	3.190	11.600	15.500	5.400	2.860	1.560	1.120	.982
13	.907	1.690	1.010	5.030	2.970	23.800	21.300	4.940	2.710	1.110	1.200	.822
14	.882	1.460	2.510	4.120	2.450	49.000	34.000	4.680	3.100	1.330	1.310	.818
15	.835	1.450	9.530	4.000	2.520	46.400	29.800	4.600	10.000	1.360	1.110	.743
16	.762	1.330	6.670	4.540	3.010	36.100	22.600	4.770	7.920	1.350	1.060	.710
17	.788	1.300	4.860	4.810	3.590	30.900	18.200	5.120	6.170	1.450	.971	.657
18	.787	1.260	4.190	5.140	3.550	25.500	15.300	4.660	4.670	1.350	.844	.665
19	.741	1.270	3.590	5.300	3.670	23.700	13.700	4.820	3.940	1.550	.860	.633
20	.727	1.240	10.500	4.280	3.750	23.400	12.400	4.960	3.430	2.260	.821	.621
21	.762	1.180	14.100	3.620	3.950	24.100	11.700	4.360	3.060	2.210	.818	.587
22	.762	1.090	10.600	3.400	4.740	55.100	11.100	4.430	2.590	2.010	1.140	.555
23	.880	1.250	8.310	3.500	5.690	85.200	10.300	4.410	2.810	1.900	1.010	.615
24	3.020	1.190	6.770	3.640	7.990	61.500	9.370	4.480	3.380	1.730	.899	.619
25	3.670	1.200	5.680	4.280	24.200	38.000	8.810	4.300	3.040	1.590	.700	.595
26	2.610	1.300	4.680	5.940	30.600	30.000	8.190	5.970	2.120	1.430	.668	.633
27	2.030	1.470	4.120	5.420	30.700	24.000	7.530	6.800	2.440	1.140	.585	.602
28	1.660	2.160	3.670	4.810	48.100	19.600	6.930	4.830	2.040	1.160	.563	.676
29	1.460	2.440	3.360	4.660		16.800	6.440	4.660	1.670	1.250	.483	.688
30	1.120	2.040	3.190	4.660		14.300	6.030	4.720	1.730	1.190	.591	.682
31	.980		3.070	4.120		12.800		5.120		1.340	.639	

Computed as Potomac River at Point of Rocks, Maryland less Shenandoah River at Millville, West Virginia.

Note: Data for water years 1959-1960 and 1960-1961 incorrectly reported as the sum of the two points. Corrected data will be furnished on request.

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RAINY RIVER
STATION LOCATION RAINY RIVER AT
BAUDETTE, MINNESOTA 96

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
1	2	62	300	0	0	20	0	0	0	200	110	110	180	69	1																		
2	5	62	5800	50	4660	20	0	20	0	560	430	180	110	16	5	69	2																
2	19	62	700	0	0	20	0	0	0	660	50	110	450	69	3																		
3	5	62	1400	20	0	20	0	110	430	510	280	60	360	65	2	69	2																
3	19	62	600	0	20	0	0	50	0	400	90	340	200	69	1																		
4	2	62	00	0	0	0	0	0	0	20	0	0	0																				
4	16	62	100	0	0	0	0	0	40	20	0	20	0																				
5	7	62	800	0	0	20	0	150	20	250	390	20	40																				
5	21	62	400	0	0	40	0	0	0	40	310	0	0																				
6	4	62	1300	0	40	0	0	110	0	590	550	190	460	71	2	69	1	92	1														
6	18	62	3400	0	60	150	40	390	100	950	1660	190	250	69	2	77	2	57	2	92	2	71	1	68	1	93	1						
7	2	62	500	0	0	110	0	0	0	80	300	210	40																				
7	16	62	900	360	0	160	0	0	0	270	110	70	50	2	1	69	1																
8	6	62	1500	210	0	0	0	0	0	990	330	0	120	69	3	2	1																
8	20	62	1000	0	0	120	0	40	0	500	330	0	0	71	1	69	1	77	1														
9	4	62	600	10	0	0	0	0	10	360	180	320	350																				
9	17	62	1200	60	0	80	0	40	0	500	540	120	80	69	2																		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RAINY RIVER
STATION LOCATION RAINY RIVER AT
BAUDETTE, MINNESOTA 096

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
1	2	62	60	22	45	22	61	10	56	7	39	1050	0	19	15	1	14	1							7	50	1	76	1			2	1
2	5	62	60	21	61	16	56	11	83	9	43	4090	10	4											0							0	0
2	19	62	60	34	56	13	61	12	45	7	34	10940	10	6	6	1									0							2	0
3	5	62	60	20	56	18	83	12	61	8	42	5090	0	97	19	5									3	50	1					1	1
3	19	62	60	15	95	10	56	10	58	9	56	180	0	14	46	2									0							0	0
4	2	62										190	0	0											0							0	0
4	16	62	65	11	33	10	16	9	56	7	63	20	0	0											0							2	0
5	7	62	60	38	92	10	56	10	61	7	35	20	0	0											0							0	0
5	21	62	92	32	70	13	9	5	60	3	47	0	0	2											15	76	2	50	1			1	0
6	4	62	60	57	56	10	61	9	92	5	19	60	10	6											1							0	0
6	18	62	60	27	56	20	95	8	92	7	38	790	0	0											0							0	0
7	2	62	95	28	56	16	9	12	58	12	32	0	0	59	11	3	22	2	17	1	10	1			6	76	1					1	0
7	16	62	58	68	95	9	9	5	61	3	15	0	0	3											1							0	0
8	6	62	58	52	56	17	47	7	95	6	18	0	0	42	11	2	22	2	46	1					6	50	1	76	1			2	2
8	20	62	58	25	9	25	56	14	47	6	30	0	0	45	11	3	17	2							6	51	2					0	0
9	4	62	58	19	56	18	57	14	9	13	36	0	0	168	11	4	17	3	22	3	16	3	15	2	9	50	2	76	1			0	2
9	17	62	58	29	56	18	45	18	47	7	28	0	0	18	11	2									0							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RAINY RIVER
STATION LOCATION RAINY RIVER AT
BAUDETTE, MINNESOTA 96

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA							DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL					ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±		MO.	DAY	µµc/g	±	µµc/g	±
1	2	62	1	15	0	1	0	1	0	1	2	5	6	5	8	7							
1	8	62	1	18	0	1	0	0	0	1	5	4	9	4	14	6							
1	15	62	1	29	0	1	0	1	0	1	5	5	5	4	10	7							
1	22	62	2	6	0	1	0	0	0	1	8	4	5	4	13	6							
1	29	62	2	14	0	1	0	1	0	1	8	4	7	4	15	6							
2	5	62	2	16	0	1	0	0	0	1	7	5	8	4	15	7							
2	12	62	2	23	2	1	0	1	2	1	16	6	10	4	26	7							
2	19	62	3	8	0	1	0	1	0	1	8	4	7	4	15	6							
2	26	62	3	13	1	1	0	0	1	1	30	6	10	4	40	7							
3	5	62	3	20	1	1	0	1	1	1	20	6	5	4	25	7							
3	12	62	3	27	1	1	0	1	1	1	18	5	12	4	30	6							
3	19	62	4	4	0	1	0	2	0	2	11	4	14	6	25	7							
3	26	62	4	9	0	1	0	1	0	1	10	6	7	6	17	8							
4	2	62	4	17	1	1	0	3	1	3	4	8	15	13	19	15							
4	9	62	4	25	1	2	0	1	1	2	0	20	12	20	12	28							
4	14	62	5	22	2	2	0	1	2	2	9	21	13	28	22	35							
4	23	62	5	28	-	-	-	-	-	-	0	29	0	30	0	42							
4	30	62	6	4	0	0	0	1	0	1	2	5	33	7	35	9							
5	7	62	7	11	0	1	0	1	0	1	4	5	27	7	31	9							
5	14	62	6	22	-	-	-	-	-	-	22	7	77	10	99	12							
5	21	62	6	26	0	0	0	0	0	0	7	6	111	11	118	13							
5	28	62	7	27	0	0	0	1	0	1	9	5	56	7	65	9							
6	4	62	7	6	0	3	0	1	0	3	25	33	47	8	72	34							
6	11	62	7	16	0	1	0	2	0	2	85	27	93	43	178	51							
6	18	62	7	17	1	3	5	8	6	9	0	78	19	34	19	85							
6	25	62	7	23	2	2	0	2	2	3	45	12	15	12	60	16							
7	2	62	8	10	0	0	0	1	0	1	6	5	37	6	43	7							
7	9	62	8	15	0	0	0	1	0	1	17	6	49	7	66	9							
7	16	62	8	6	0	0	1	1	1	1	7	5	42	7	49	9							
7	23	62	8	20	0	1	0	0	0	1	23	3	37	3	60	4							
7	30	62	9	11	0	0	0	0	0	0	40	8	8	6	48	10							
8	6	62	8	29	0	0	0	0	0	0	14	5	46	7	60	8							
8	13	62	10	3	0	2	0	2	0	3	22	38	22	29	44	48							
8	20	62	9	5	0	1	0	0	0	1	15	12	36	7	51	14							
8	27	62	9	11	0	1	0	1	0	1	7	10	32	12	39	16							
9	4	62	9	20	0	1	0	1	0	1	5	10	50	7	55	12							
9	10	62	9	28	0	0	0	1	0	1	18	7	51	8	69	11							
9	17	62	10	15	0	1	0	1	0	1	29	6	40	7	69	9							
9	24	62	10	24	0	0	0	0	0	0	6	5	30	7	36	9							

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RAINY RIVER
STATION LOCATION RAINY RIVER AT
BAUDETTE, MINNESOTA 96

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
7	9	62	7	16	2980	257	148	109	3	37	37	3	3	29	2	18	16	1	36
8	13	62	8	20	2200	375	192	183	4	58	39	5	3	30	1	23	21	2	45
9	10	62	9	17	3850	273	91	182	2	24	25	2	2	21	0	12	6	2	20

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RAINY RIVER
STATION LOCATION RAINY RIVER AT
BAUDETTE. MINNESOTA 96

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
4	2	62	-	-	7.6	-	-	-	-	-	9	290	368	15	-	255	.1	702	-
4	9	62	-	-	-	-	-	-	-	-	18	280	360	5	-	270	.0	742	-
4	16	62	-	-	7.4	-	-	-	-	-	8	284	348	5	0	255	.5	683	-
4	23	62	-	-	-	-	-	-	-	-	9	296	360	0	-	240	.2	699	-
4	30	62	-	-	-	-	-	-	-	-	8	84	116	70	-	10	-	-	-
5	7	62	-	-	-	-	-	-	-	-	5	-	84	100	-	13	-	-	-
6	11	62	-	-	8.3	-	-	-	-	-	16	420	1050	20	*25	725	.0	1600	-
6	18	62	-	-	-	-	-	-	-	-	13	300	692	40	25	430	.2	925	-
6	25	62	-	-	-	-	-	-	-	-	8	146	308	50	160	170	-	-	-
7	23	62	-	-	-	-	-	-	-	-	9	-	-	120	93	-	-	137	-
7	30	62	-	-	8.0	-	-	-	-	-	5	44	160	120	47	8	.0	-	-
8	6	62	-	-	7.9	-	-	-	-	-	5	50	64	120	*25	-	.0	-	-
8	13	62	-	-	-	-	43	-	-	-	14	524	910	30	25	400	-	1234	-
8	27	62	-	-	-	-	-	-	-	-	33	136	272	60	25	85	.0	369	-
9	4	62	-	-	7.8	-	-	-	-	-	8	40	150	50	25	18	.0	-	-
9	10	62	-	-	-	-	-	-	-	-	8	88	170	60	25	20	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Manitou Rapids, Minnesota
Operated by U.S. Geological Survey

STATE	Minnesota
MAJOR BASIN	Upper Mississippi River
MINOR BASIN	Rainy River
STATION LOCATION	Rainy River at Baudette, Minnesota

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	10.700	10.000	9.000	11.300	8.800	11.300	10.600	25.800	39.900	26.200	16.800	19.600
2	11.000	8.860	9.900	11.000	8.600	12.300	9.430	25.300	39.700	24.300	16.700	20.100
3	11.100	8.790	9.850	11.000	8.700	12.400	9.870	23.900	38.800	23.900	16.500	19.400
4	11.400	8.880	8.900	10.000	8.800	12.400	10.600	22.400	37.700	24.400	16.600	19.100
5	11.600	7.420	8.000	8.800	8.300	11.400	11.100	20.800	36.700	24.800	17.200	17.500
6	11.600	7.560	9.200	10.200	7.900	12.000	11.900	19.800	35.800	25.200	19.100	15.400
7	11.400	9.080	10.000	9.700	8.300	12.400	12.000	18.200	35.100	28.300	26.500	13.400
8	10.500	9.320	9.800	9.400	9.000	12.400	12.200	17.700	34.700	35.700	30.600	12.900
9	9.020	9.180	9.800	9.300	9.300	12.400	11.300	17.500	34.100	42.000	30.900	13.400
10	8.380	8.970	9.400	10.200	10.200	12.300	12.200	17.500	33.600	49.900	31.100	13.200
11	10.100	8.490	8.600	10.000	9.100	12.500	12.300	17.600	33.200	51.600	30.900	20.100
12	10.900	6.400	9.000	10.200	8.200	11.000	12.100	17.900	32.800	48.100	30.100	25.100
13	11.100	7.000	9.500	10.500	9.000	11.800	12.000	17.700	32.000	43.600	30.400	27.100
14	11.300	7.600	9.800	8.900	9.800	12.200	11.800	17.700	30.400	40.200	30.800	26.900
15	10.800	7.160	10.200	9.000	9.800	12.300	11.500	20.100	29.400	36.700	30.400	23.600
16	11.600	7.500	10.400	8.600	10.200	12.400	11.500	22.000	27.000	34.500	29.600	21.400
17	12.000	7.800	10.500	8.800	10.200	12.400	11.100	26.300	26.200	32.900	28.800	20.200
18	12.400	7.900	10.000	8.600	10.000	12.500	12.800	37.300	26.400	31.600	28.000	19.600
19	12.200	7.760	9.500	8.400	9.200	11.000	14.300	46.500	31.900	28.400	27.300	17.000
20	11.200	7.880	10.300	8.400	9.600	11.100	15.500	51.000	34.600	26.900	26.200	15.600
21	10.200	9.020	10.600	7.600	10.400	11.000	17.700	50.100	35.800	25.000	22.300	14.100
22	8.820	8.880	10.700	7.500	10.700	11.000	18.900	46.900	35.200	25.200	20.400	13.100
23	8.990	9.290	10.800	8.100	10.400	10.700	19.000	47.500	34.600	25.400	20.000	12.600
24	10.700	9.250	10.800	8.700	10.600	10.600	19.200	50.700	33.800	24.000	19.900	11.700
25	10.900	9.500	11.000	8.400	10.700	10.600	19.100	54.100	33.200	23.300	19.700	12.200
26	10.400	9.710	11.200	8.500	10.300	9.360	18.700	54.800	32.600	23.100	19.100	12.600
27	10.300	9.270	11.400	8.600	10.700	9.870	18.700	52.700	31.800	22.600	17.600	12.800
28	10.200	8.820	10.500	7.900	11.000	10.500	19.800	48.900	31.300	20.000	18.200	12.800
29	9.060	9.540	9.600	7.500		10.600	22.700	45.400	28.500	18.200	18.700	12.700
30	8.930	9.250	10.300	8.000		10.700	24.500	43.600	27.000	17.000	18.700	12.500
31	9.540		10.900	8.400		10.700		40.600		16.900	18.700	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RAINY RIVER
STATION LOCATION RAINY RIVER AT
INTERNATIONAL FALLS, MINNESOTA 101

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE - GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
11	21	61	500	0	0	0	0	20	0	440	40	20	60	69	1	71	1																
12	4	61	400	0	0	0	0	0	0	310	80	40	0	69	1																		
12	18	61	800	20	20	0	0	70	0	560	110	0	20	69	2																		
1	2	62	00	0	0	0	0	0	0	0	0	20	0																				
1	15	62	100	0	0	0	0	0	0	40	20	20	0																				
2	5	62	100	0	0	0	0	50	20	50	0	0	0																				
2	19	62	100	0	0	0	0	0	20	60	60	0	0																				
3	5	62	100	0	0	0	0	0	0	60	0	0	0																				
3	19	62	00	0	0	0	0	0	0	0	0	0	0																				
4	2	62	200	0	0	0	0	0	0	80	100	0	20																				
4	16	62	100	0	0	20	0	20	0	20	0	0	20																				
5	7	62	1800	0	0	20	0	890	0	780	130	130	20	57	3	71	3																
5	21	62	1500	0	20	20	0	0	0	1180	270	170	60	71	3	69	1																
6	4	62	900	0	0	0	0	380	0	340	210	170	40	57	2	69	1	92	1														
6	18	62	3300	40	0	0	0	0	0	840	2450	380	1180	92	4	71	2	68	2														
7	2	62	500	0	0	40	0	40	0	250	170	130	130	69	1																		
7	16	62	400	20	0	40	0	50	0	160	90	50	20																				
8	6	62	800	0	0	0	0	60	20	540	170	80	120	69	2	68	1																
8	21	62	800	0	0	0	0	0	0	380	420	0	80	69	1	92	1																
9	4	62	1500	0	130	0	0	0	0	760	590	250	170	69	2	93	2																
9	17	62	1000	0	0	0	0	0	0	340	660	40	250	92	1	71	1	68	1														

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RAINY RIVER
STATION LOCATION RAINY RIVER AT
INTERNATIONAL FALLS, MINNESOTA 101

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					RCTIFERS											CRUSTACEA								
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)						NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
11	21	61	61	36	60	24	58	20	83	5	15	0	0	18	11	1	17	1							3	76	1					0	0
12	4	61	61	48	60	16	83	15	58	6	15	0	10	18	11	2									1							0	0
12	18	61	61	68	60	14	57	6	84	3	9	110	0	0											0							0	0
1	2	62	61	36	38	9	57	8	56	5	42	0	0	19	11	2	14	1							4							0	0
1	15	62										0	10	8											3	76	1					0	0
2	5	62										0	0	6											4							0	0
2	19	62										210	0	2											0							1	0
3	5	62	61	28	57	13	45	9	9	6	44	0	0	0											1							0	0
3	19	62										20	0	5											2							0	0
4	2	62	61	21	60	12	9	6	82	4	57	0	0	3											1							0	0
4	16	62	60	23	61	16	58	7	45	5	49	0	0	3											3							0	0
5	7	62	60	39	82	7	61	6	31	6	42	110	0	3											2							0	0
5	21	62	60	62	82	5	56	5	61	3	25	0	10	18	21	1									11	50	2					0	1
6	4	62	60	39	56	17	61	8	9	6	30	0	0	28	10	1	11	1	17	1					9	76	1	50	1			0	0
6	18	62	56	23	95	19	92	17	58	8	33	0	10	120	11	4	10	3	17	2	22	1	46	1	14	76	2	50	1			0	0
7	2	62	95	55	9	12	58	9	24	6	18	0	0	41	17	2	10	2	22	1	11	1			5	76	1					0	0
7	16	62	58	66	95	11	9	6	57	4	13	140	0	14	17	1									13	50	2	76	1			0	0
8	6	62	58	75	57	6	24	5	47	4	10	0	0	159	17	4	11	4	21	2	5	2	2	1	50	50	4	76	3	53	2	0	0
8	21	62	58	31	56	19	9	16	47	9	25	0	0	71	11	3	17	2	22	2	10	1	15	1	21	50	3	98	2			0	0
9	4	62	95	24	58	21	56	14	47	8	33	0	0	178	17	4	11	3	21	3	22	2	46	1	48	50	4	76	3	51	2	0	0
9	17	62	58	29	56	20	45	10	9	9	32	0	0	283	11	5	17	4	22	3	21	1	16	1	33	50	3	76	3			-	-

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	MINNESOTA
MAJOR BASIN	UPPER MISSISSIPPI RIVER
MINOR BASIN	RAINY RIVER
STATION LOCATION	RAINY RIVER AT INTERNATIONAL FALLS, MINNESOTA 101

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA							DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL					ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±		MO.	DAY	μμc/g	±	μμc/g	±
11	21	61	12	4	0	1	0	0	0	1	6	4	12	4	18	6							
11	27	61	12	11	0	0	0	1	0	1	5	4	17	4	22	6							
12	4	61	12	11	0	0	0	0	0	0	12	4	23	4	35	6							
12	11	61	12	19	0	0	0	1	0	1	2	4	17	4	19	6							
12	18	61	1	3	0	0	0	1	0	1	1	4	10	4	11	6							
12	26	61	1	5	0	1	0	0	0	1	3	4	13	4	16	6							
1	2	62	1	12	0	1	0	0	0	1	3	4	11	4	14	6							
1	8	62	1	22	0	0	0	0	0	0	4	4	12	4	16	6							
1	15	62	1	24	0	1	0	0	0	1	0	5	8	5	8	7							
1	22	62	1	30	0	0	0	0	0	0	2	5	8	5	10	7							
1	29	62	2	14	0	0	0	0	0	0	0	4	10	4	10	6							
2	5	62	2	14	0	0	0	0	0	0	2	5	9	5	11	7							
2	12	62	2	26	0	0	0	1	0	1	1	4	10	4	11	6							
2	19	62	3	1	0	0	1	1	1	1	2	5	10	5	12	7							
2	26	62	3	9	0	1	0	1	0	1	0	4	8	4	8	6							
3	5	62	3	15	0	2	0	1	0	2	0	9	9	5	9	10							
3	12	62	3	26	0	1	0	1	0	1	0	4	7	4	7	6							
3	19	62	3	30	0	0	0	1	0	1	1	4	9	5	10	6							
3	26	62	4	5	0	2	0	1	0	2	4	7	8	4	12	8							
4	2	62	4	13	0	0	0	0	0	0	1	4	6	4	7	6							
4	10	62	4	23	0	1	0	1	0	1	3	4	18	4	21	5							
4	16	62	5	23	0	0	0	1	0	1	0	6	12	6	12	8							
4	23	62	5	29	0	0	0	0	0	0	1	5	22	6	23	7							
5	14	62	6	21	0	0	0	0	0	0	7	5	28	6	35	8							
5	21	62	6	25	0	1	0	0	0	1	3	6	33	7	36	9							
5	28	62	6	28	0	0	0	1	0	1	7	5	41	6	48	7							
6	4	62	7	6	0	0	0	0	0	0	7	5	38	6	45	8							
6	11	62	7	9	0	0	0	1	0	1	7	5	23	7	30	9							
6	18	62	7	17	0	1	1	1	1	1	22	10	42	6	64	12							
6	25	62	7	20	0	1	0	0	0	1	11	4	45	5	56	6							
7	2	62	8	10	0	0	0	0	0	0	8	3	37	3	45	4							
7	24	62	8	21	0	1	0	1	0	1	8	5	37	6	45	7							
7	30	62	8	17	0	0	0	1	0	1	2	5	36	6	38	7							
8	6	62	8	23	0	0	0	0	0	0	6	5	24	6	30	7							
8	13	62	8	31	0	1	0	1	0	1	5	5	36	6	41	8							
8	21	62	9	5	0	0	0	0	0	0	5	5	30	6	35	7							
8	27	62	9	13	0	0	0	0	0	0	11	6	30	8	41	10							
9	4	62	9	21	0	0	0	0	0	0	25	5	29	6	54	7							
9	10	62	10	2	0	0	0	0	0	0	2	5	6	5	8	7							

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RAINY RIVER
STATION LOCATION RAINY RIVER AT
INTERNATIONAL FALLS, MINNESOTA 101

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	28	61	12	13	5070	233	58	175	1	16	17	3	1	13	0	5	4	1	14
1	16	62	1	31	5163	223	66	157	9	19	9	1	1	7	0	6	5	1	17
2	5	62	2	20	5149	335	104	231	8	24	15	1	1	12	1	8	8	1	40
3	5	62	3	20	5196	292	116	176	21	26	15	1	1	12	1	8	11	1	34
4	9	62	4	24	5157	271	109	162	4	33	16	1	1	13	1	10	13	1	32
5	7	62	5	22	5123	266	161	105	11	45	21	2	1	18	0	13	20	1	50
6	4	62	6	20	5105	289	139	150	7	38	22	1	1	18	2	15	15	2	40
7	2	62	7	17	5067	303	170	133	5	53	25	2	0	21	2	15	17	2	53
7	30	62	8	14	5116	272	159	113	5	51	25	1	3	20	1	14	22	2	40
9	4	62	9	19	5125	256	114	142	1	38	21	1	1	19	0	13	14	1	26

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RAINY RIVER
STATION LOCATION RAINY RIVER AT
INTERNATIONAL FALLS, MINNESOTA 101

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
11	21	61	1.7	12.8	7.1	1.3	42	3.5	8.3	.6	3	20	22	41	1	8	.0	26	40
11	27	61	.4	12.8	7.2	1.4	46	2.3	7.3	.7	-	18	24	35	1	7	.0	37	59
12	4	61	1.1	12.9	7.2	1.1	49	4.3	10.9	.3	2	18	18	27	1	6	-	36	100
12	11	61	.7	12.9	7.0	1.9	33	4.0	12.0	.5	-	18	23	45	1	7	-	43	57
12	18	61	.8	12.7	7.2	1.7	39	4.0	9.3	.5	-	18	23	24	1	6	-	52	40
12	26	61	.4	12.9	7.0	1.3	45	4.0	9.0	.5	-	19	25	22	2	8	-	47	7
1	2	62	.6	12.5	6.9	1.5	60	3.6	-	.5	4	16	25	23	1	8	.0	36	31
1	8	62	.4	12.4	6.9	1.5	40	4.4	9.8	.6	-	18	24	25	1	5	-	57	4
1	15	62	.7	12.4	7.0	.9	32	4.3	9.4	.4	6	19	24	20	1	6	.0	40	34
1	22	62	.5	12.3	7.0	1.0	36	5.2	9.6	.4	4	19	26	19	1	6	.0	52	22
1	29	62	.5	12.5	6.9	1.0	32	4.3	9.5	.4	6	21	24	21	1	6	-	54	25
2	5	62	.9	12.5	7.1	.8	48	4.3	9.7	.5	2	21	24	21	1	6	.1	41	5
2	12	62	.7	12.5	7.0	3.2	37	3.8	10.7	.5	-	18	23	22	1	6	-	50	22
2	19	62	.8	12.5	7.1	1.4	44	4.0	9.4	.5	3	22	25	23	0	6	-	42	27
2	26	62	.5	12.5	7.0	1.5	30	4.0	8.9	.5	-	21	24	26	1	6	-	51	26
3	5	62	.6	11.9	6.9	1.1	28	4.3	8.7	.5	-	19	25	21	1	7	-	46	37
3	12	62	.7	12.0	7.0	1.0	32	3.9	8.5	.6	0	20	27	21	1	7	.0	44	11
3	19	62	.7	11.9	6.8	1.1	26	3.6	8.1	.5	-	20	26	20	0	7	-	60	180
3	26	62	1.2	11.6	7.0	.7	43	3.3	8.1	.5	-	20	26	20	0	6	-	45	220
4	2	62	1.2	11.9	6.8	.9	26	4.2	9.4	.5	9	21	30	23	0	6	-	30	100
4	10	62	.9	12.3	7.0	1.2	39	3.9	8.3	.6	3	20	23	18	0	6	-	47	73
4	16	62	1.7	12.2	7.0	.5	28	4.5	11.5	.6	3	21	24	24	1	6	-	62	140
4	23	62	2.6	11.3	6.8	.6	25	3.9	9.8	.6	-	21	25	21	1	7	-	35	77
4	30	62	4.8	11.7	6.8	.6	30	4.3	10.8	.6	-	18	22	18	1	7	-	44	190
5	7	62	4.5	12.2	6.8	.9	27	4.3	10.9	.6	-	17	25	25	2	7	-	41	77
5	14	62	6.4	12.2	6.9	.6	36	4.5	10.2	.6	4	19	26	28	2	7	-	53	400
5	21	62	9.9	11.3	6.9	.8	29	5.4	12.6	.6	-	18	27	30	3	7	-	50	80
5	28	62	11.2	10.3	7.0	1.0	36	6.9	13.2	.6	-	19	25	58	2	7	-	51	10
6	4	62	13.0	11.2	7.0	1.0	37	5.3	14.2	.5	-	20	25	35	2	7	-	48	60
6	11	62	15.7	9.6	6.9	1.2	41	5.9	11.8	.6	-	19	21	27	1	4	-	47	35
6	18	62	15.7	8.7	6.9	1.3	25	5.2	12.4	.7	-	19	21	26	2	4	-	43	730
6	25	62	17.1	8.4	6.7	1.1	32	4.7	11.5	.7	3	19	20	34	2	6	-	59	270
7	2	62	19.9	8.0	6.9	1.1	32	4.9	10.3	.8	-	17	22	32	1	6	-	-	160
7	9	62	18.9	8.0	6.7	.7	14	4.9	11.6	.8	-	23	27	36	2	6	-	41	2000
7	16	62	19.5	8.3	6.9	.9	28	6.2	12.8	.7	-	20	25	36	2	6	-	36	120
7	24	62	20.1	7.3	7.0	.8	34	-	-	.7	-	19	21	32	1	6	-	48	180
7	30	62	19.3	7.2	6.9	.8	25	5.6	12.2	.7	-	18	20	28	1	6	-	47	120
8	6	62	20.7	7.3	6.9	1.0	23	5.4	14.2	.8	-	19	20	26	2	6	-	53	1100
8	13	62	19.4	7.6	7.2	.7	37	5.6	12.4	.6	4	18	20	34	1	6	-	49	110

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MINNESOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RAINY RIVER
STATION LOCATION RAINY RIVER AT
INTERNATIONAL FALLS, MINNESOTA 101

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	21	62	19.6	7.9	7.5	1.0	34	4.7	11.3	.5	3	20	22	26	1	10	-	39	130
8	27	62	19.0	7.5	7.0	.9	56	4.2	13.6	.5	-	18	24	28	2	4	-	33	120
9	4	62	18.1	8.0	7.2	1.2	31	4.2	11.0	.6	-	20	21	27	1	6	-	51	120
9	10	62	17.0	8.4	7.2	1.0	29	4.3	11.4	.5	-	20	21	38	1	6	-	56	570
9	17	62	15.0	8.6	7.1	.9	26	4.0	10.6	.6	2	20	19	34	1	6	-	42	140
9	24	62	13.9	9.2	7.2	.5	27	4.3	11.0	.6	-	20	20	34	1	6	-	52	300

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at International Falls, Minnesota
Data Supplied by International Joint Commission

STATE	**Minnesota**
MAJOR BASIN	**Upper Mississippi River**
MINOR BASIN	**Rainy River**
STATION LOCATION	**Rainy River at** **International Falls, Minnesota**

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	8.850	7.750	9.260	10.400	8.130	12.000	8.450	10.300	29.100	20.300	13.200	18.800
2	8.960	7.600	9.250	10.700	8.440	12.000	10.200	10.000	28.900	20.500	13.300	18.000
3	9.570	8.460	7.540	9.720	8.540	12.000	10.100	10.200	29.000	21.200	13.300	17.900
4	9.900	5.740	8.410	9.870	7.970	10.000	10.100	10.100	29.400	21.800	13.300	16.000
5	9.800	6.950	9.280	10.800	6.980	11.800	10.000	10.000	29.700	22.100	12.400	13.900
6	9.860	9.230	9.410	9.070	8.160	11.900	9.960	9.410	28.600	22.100	20.200	11.900
7	8.850	8.620	9.210	9.060	8.680	12.100	10.100	10.100	29.500	22.400	20.600	11.400
8	6.940	8.670	9.200	8.480	8.980	12.000	8.100	10.100	28.800	21.800	20.600	11.400
9	6.450	8.450	8.920	10.200	9.060	12.000	9.680	10.000	29.300	21.900	23.400	9.000
10	9.220	8.210	7.510	9.460	8.870	12.100	10.100	10.000	29.400	25.700	24.100	16.700
11	9.520	4.370	8.020	9.810	7.120	9.540	9.900	10.200	29.100	28.000	24.200	21.300
12	9.100	7.180	8.920	10.100	8.110	11.800	9.970	10.200	29.000	28.800	24.000	22.500
13	9.210	7.480	9.110	8.110	9.790	12.000	10.100	8.700	27.400	29.200	24.200	22.500
14	10.400	5.900	10.100	8.120	9.700	11.900	9.860	10.000	26.900	29.300	24.000	18.500
15	9.200	6.720	10.200	8.020	9.710	11.900	10.200	10.100	22.900	29.200	24.000	17.000
16	10.400	7.030	10.200	8.690	9.970	12.000	9.270	10.100	22.200	29.200	24.000	16.600
17	10.600	7.220	9.180	8.220	9.750	12.000	9.990	15.000	20.600	29.000	23.900	16.900
18	10.700	6.900	9.060	8.040	8.410	10.300	10.000	24.000	25.300	24.900	24.000	13.500
19	9.200	7.610	9.680	8.200	8.730	10.700	9.960	29.200	25.600	23.600	23.800	13.100
20	8.830	9.250	10.400	7.080	10.100	10.600	9.950	27.700	28.000	20.800	18.300	11.700
21	6.650	8.160	10.400	7.040	10.300	10.600	9.840	28.400	28.600	20.600	17.000	11.100
22	8.150	9.190	10.300	7.080	10.100	10.500	9.220	27.800	28.400	20.400	17.000	11.000
23	10.300	8.120	10.400	8.820	10.300	10.500	9.920	27.800	28.500	18.300	17.000	9.440
24	9.660	9.470	10.400	7.860	10.700	10.600	9.960	27.700	28.500	16.900	17.000	11.000
25	9.040	9.450	10.700	8.250	9.550	8.750	9.950	27.800	28.400	17.100	17.000	11.000
26	9.330	8.200	10.800	8.530	10.500	10.300	10.100	27.700	28.400	17.000	14.300	11.100
27	9.510	7.700	9.100	7.200	10.800	10.500	10.000	28.200	28.200	13.700	16.600	11.400
28	7.500	9.180	9.840	6.550	10.700	10.400	10.000	28.400	24.100	13.300	16.800	11.300
29	8.050	8.320	9.860	7.700		10.500	8.650	28.700	22.100	12.200	17.100	11.300
30	8.650	8.360	10.400	8.300		10.500	9.960	28.600	22.200	13.200	17.100	9.390
31	9.150		10.800	8.640		10.500		26.400		13.300	18.300	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEW JERSEY
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN NEW JERSEY-N.Y. METROPOLITAN AREA
STATION LOCATION RARITAN RIVER AT
PERTH AMBOY, NEW JERSEY 123A
/FIVE FEET BELOW SURFACE/

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
[illegible]	27	62	9	19	3	8	0	70	3	71	36	121	129	286	165	311						

687-228 O-63—41

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW JERSEY
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN NEW JERSEY-N.Y. METROPOLITAN AREA
STATION LOCATION RARITAN RIVER AT
PERTH AMBOY, NEW JERSEY 123A
/FIVE FEET BELOW SURFACE/

DATE OF SAMPLE			ALGAE *(Number per milliliter)*									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED *(Pigmented)*		DIATOMS				1ST		2ND		3RD		4TH.		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
8	6	62	3000	40	0	170	0	520	1590	560	120	210	0	63	3	62	2	51	2	67	1	52	1										
8	20	62	600	0	0	40	0	150	230	120	80	0	40	63	1																		
9	4	62	4100	1450	0	350	0	1660	100	370	120	80	40	51	4	3	4	68	1	67	1	40	1										
9	17	62	100	0	0	0	0	0	0	60	10	30	10																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW JERSEY

MAJOR BASIN NORTH ATLANTIC

MINOR BASIN NEW JERSEY-N.Y. METROPOLITAN AREA

STATION LOCATION RARITAN RIVER AT

PERTH AMBOY, NEW JERSEY 123A

/FIVE FEET BELOW SURFACE/

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
8	6	62	20	18	10	6	82	5	97	5	66	0	0	140	4	4	21	4							55	50	5	76	1			1	0
8	20	62	20	14	97	7	97	7	65	6	66	0	0	90	2	4	21	3	17	1	16	1			33	50	4					0	0
9	4	62	18	17	75	14	27	13	3	10	46	0	0	18	21	2	2	1							417	50	5	76	3	77	1	0	0
9	17	62	20	41	20	25	18	6	26	3	25	0	0	0											96	50	5	77	2			0	1

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE NEW JERSEY

MAJOR BASIN NORTH ATLANTIC

MINOR BASIN NEW JERSEY-N.Y. METROPOLITAN AREA

STATION LOCATION RARITAN RIVER AT

PERTH AMBOY, NEW JERSEY 123A

/FIVE FEET BELOW SURFACE/

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES											
BEGINNING			END								NEUTRALS									
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
8	20	62	8	27	4495#	1697	92	*1605	1	10	44	4	4	33	3	15	5	2	15
9	26	62	10	1	3283	3315	178	*3137	5	39	66	5	5	52	4	23	14	4	27

*SALT CONTENT OF ALCOHOL EXTRACTABLES IN EXCESS OF:
1,000 PPB FOR 8 20 62 AND
1,936 PPB FOR 9 26 62

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW JERSEY
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN NEW JERSEY-N.Y. METROPOLITAN AREA
STATION LOCATION RARITAN RIVER AT
PERTH AMBOY, NEW JERSEY 123A
/FIVE FEET BELOW SURFACE/

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	21	62	23.3	4.6	7.3	-	-	10.1	-	-	10200	82	-	-	-	-	-	-	-
6	27	62	23.3	5.3	7.3	-	-	1.8	14.0	-	10500	74	-	-	-	-	-	-	-
7	6	62	23.4	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	20	62	24.6	4.2	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	26	62	23.7	3.3	5.9	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-
8	6	62	25.3	5.4	7.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	13	62	23.2	3.4	6.0	-	-	-	-	-	8080	68	2850	-	-	-	-	-	-
8	20	62	24.9	3.1	6.8	-	-	11.4	15.7	-	12447	89	3914	-	-	-	-	25688	-
8	27	62	25.5	3.4	7.4	4.0	120	10.9	14.5	-	10600	78	3500	-	-	-	-	22508	720
9	4	62	24.9	2.8	6.8	2.5	-	7.3	14.5	-	11500	85	4024	-	-	-	-	23850	220
9	10	62	23.3	5.8	7.1	3.9	-	11.4	16.1	-	8970	88	3124	-	-	-	-	18600	900
9	17	62	-	2.1	6.8	1.8	-	13.1	16.6	-	13020	-	3980	-	-	-	-	25800	870
9	24	62	-	3.4	-	1.4	-	13.4	17.3	-	12570	-	3900	-	-	-	-	26100	340

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW JERSEY
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN NEW JERSEY-N.Y. METROPOLITAN AREA
STATION LOCATIONRARITAN RIVER AT
PERTH AMBOY, NEW JERSEY 123B
/FIVE FEET ABOVE BOTTOM/

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	21	62	22.8	4.1	7.3	-	-	8.8	-	-	11100	88	-	-	-	-	-	-	-
6	27	62	22.8	5.2	7.4	-	-	2.2	13.6	-	13300	91	-	-	-	-	-	-	-
7	6	62	23.1	6.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	20	62	24.9	3.8	6.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	26	62	23.6	3.1	6.3	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-
8	6	62	24.4	3.7	6.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	13	62	22.4	2.4	6.4	-	-	-	-	-	12400	85	4354	-	-	-	-	-	-
8	20	62	24.0	2.5	7.0	-	-	11.3	17.0	-	12640	88	4076	-	-	-	-	28484	-
8	27	62	24.7	2.6	7.4	2.0	-	9.9	14.7	-	11900	86	3874	-	-	-	-	25204	340
9	4	62	24.8	2.1	6.9	1.8	-	5.3	14.3	-	12500	92	4316	-	-	-	-	25740	350
9	10	62	23.1	4.9	7.0	1.8	-	11.2	15.1	-	11610	76	3986	-	-	-	-	23900	1100
9	17	62	-	1.8	6.8	1.7	-	13.0	16.8	-	13100	-	4120	-	-	-	-	25800	1300
9	24	62	-	3.2	-	1.4	-	13.7	18.6	-	13290	-	4180	-	-	-	-	27100	90

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Bound Brook, New Jersey
Operated by U.S. Geological Survey

STATE	New Jersey
MAJOR BASIN	North Atlantic
MINOR BASIN	New Jersey-New York Metropolitan Area
STATION LOCATION	Raritan River at Perth Amboy, New Jersey

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.177	.185	.260	.491	.380	6.170	5.990	.943	.257	.210	.130	.227
2	.171	.174	.252	.465	.353	2.710	6.310	.800	.244	.189	.115	.284
3	.256	.163	.238	.405	.366	1.760	2.880	1.860	.209	.149	.110	.452
4	.282	.153	.240	.396	.382	1.320	1.980	1.270	.182	.143	.105	.329
5	.245	.181	.238	.372	.455	1.200	1.600	.924	.190	.134	.102	.340
6	.224	.181	.232	1.670	.534	1.260	1.340	.789	.399	.122	.138	.379
7	.221	.213	.231	13.200	.404	1.330	2.910	.689	.387	.126	.221	.308
8	.217	.262	.200	8.230	.334	1.560	6.120	.606	.257	.122	.575	.247
9	.210	.235	.180	3.630	.359	1.680	3.700	.610	.226	.119	.312	.209
10	.201	.220	.228	1.900	.382	1.640	4.220	.541	.197	.100	.625	.183
11	.186	.191	.248	1.160	.260	2.230	2.680	.489	.178	.082	1.010	.192
12	.174	.185	.382	.948	.286	8.620	2.520	.465	.239	.088	.515	.207
13	.182	.190	.801	.829	.292	14.600	4.410	.439	.461	.082	.333	.165
14	.220	.205	.580	.707	.314	6.100	3.220	.418	.581	.088	.293	.132
15	.307	.304	.411	.853	.346	3.290	2.460	.396	.371	.090	.238	.125
16	.284	.310	.305	1.790	.346	2.450	2.300	.387	.364	.091	.187	.124
17	.232	.402	.361	1.050	.359	2.030	1.840	.371	.315	.092	.176	.144
18	.208	.411	1.670	.689	.369	1.680	1.540	.359	.262	.099	.239	.225
19	.199	.324	3.340	.657	.474	1.430	1.340	.339	.235	.123	.212	.229
20	.191	.314	2.270	.658	.656	1.300	1.200	.328	.420	.152	.172	.200
21	.187	.334	1.560	.507	.612	1.460	1.080	.299	.258	.125	.192	.171
22	.222	.288	1.130	.597	.630	4.050	.970	.285	.232	.134	.234	.148
23	.216	.291	.847	.658	.901	2.230	.902	.263	.217	.294	.200	.154
24	.207	.469	.782	.516	7.420	1.780	.813	.361	.320	1.510	.154	.129
25	.196	.894	.693	.555	5.560	1.470	.751	.762	.435	.507	.140	.119
26	.188	.541	.653	.505	6.700	1.220	.706	.433	.387	.299	.139	.116
27	.187	.405	.564	.654	11.200	1.110	.674	.310	.334	.217	.140	.227
28	.177	.346	.678	.600	10.100	.998	.626	.272	.278	.185	1.920	.738
29	.175	.308	.626	.430		.901	.617	.259	.248	.154	.847	.657
30	.185	.273	.511	.513		.842	.737	.251	.221	.144	.383	.402
31	.221		.508	.281		.809		.253		.133	.263	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NORTH DAKOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RED RIVER OF THE NORTH
STATION LOCATION RED RIVER AT
GRAND FORKS, NORTH DAKOTA 69

DATE OF SAMPLE			ALGAE *(Number per milliliter)*									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE - GREEN		GREEN		FLAGELLATED *(Pigmented)*		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	10	61	39600	90	0	4350	0	340	160	33440	1210	11550	90	71	8	38	4	92	3	89	2	25	2	57	2	27	1	60	1				
11	9	61	103600	20	310	850	0	290	0	101000	1160	1240	80	71	9	92	3	17	2	25	1	38	1	51	1	69	1						
12	5	61	24100	0	0	210	0	580	0	23140	210	250	40	71	8	57	1	51	1	38	1												
5	9	62	22600	130	80	2070	80	420	0	15990	3840	6160	930	71	7	92	4	69	4	38	3	77	3	88	2	51	2	24	2	89	1	30	1

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NORTH DAKOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RED RIVER OF THE NORTH
STATION LOCATION RED RIVER AT
GRAND FORKS, NORTH DAKOTA 069

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	10	61	82	88	58	4	56	2	89	2	4	0	0	39	11	3									3	50	1					0	0
11	9	61	82	89	89	9		1		1		0	0	9											2							0	0
12	5	61	82	91	89	7		1		1		0	0	32	21	2	11	1							2							1	0
5	9	62	56	34	82	28	58	16	92	8	14	40	0	87	21	3	11	3	2	2	17	1			22	76	3	50	1			0	1

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NORTH DAKOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RED RIVER OF THE NORTH
STATION LOCATION RED RIVER AT
GRAND FORKS, NORTH DAKOTA 69

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	10	61	11	1	0	1	3	3	3	3	21	9	28	11	49	14						
11	1	61	11	17	-	-	-	-	-	-	16	11	56	14	72	18						
11	9	61	11	22	-	-	-	-	-	-	14	8	39	11	53	14						
11	15	61	11	28	1	1	2	2	3	2	5	10	54	15	59	18						
5	9	62	6	20	-	-	-	-	-	-	14	14	67	19	81	24						

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NORTH DAKOTA
MAJOR BASIN UPPER MISSISSIPPI RIVER
MINOR BASIN RED RIVER OF THE NORTH
STATION LOCATION RED RIVER AT
GRAND FORKS, NORTH DAKOTA 69

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	10	61	9.8	12.5	8.8	-	53	2.9	10.8	-	18	196	240	15	-	96	-	364	*7
11	1	61	5.1	12.1	8.7	6.5	55	4.3	12.4	-	18	224	276	25	-	100	.6	443	2600
11	9	61	2.0	15.2	8.9	7.3	64	4.2	14.6	-	18	250	284	25	-	-	.6	433	-
11	15	61	1.6	19.4	8.8	7.7	67	4.2	12.8	-	19	280	320	25	-	93	.8	472	*100
12	5	61	.7	12.3	8.0	-	52	1.0	16.8	-	22	308	344	20	-	67	-	428	650
5	9	62	12.0	8.7	8.2	4.7	66	4.9	12.9	-	12	204	304	25	-	-	-	502	1000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Grand Forks, North Dakota
Operated by U.S. Geological Survey

STATE	North Dakota
MAJOR BASIN	Upper Mississippi River
MINOR BASIN	Red River of the North
STATION LOCATION	Red River at Grand Forks, North Dakota

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.425	.446	.270	.200	.205	.235	.650	4.720	23.200	7.400	9.550	3.000
2	.407	.416	.295	.200	.210	.235	.720	4.600	23.400	7.000	8.500	2.900
3	.401	.425	.328	.200	.205	.240	.800	4.450	22.800	6.900	7.800	2.900
4	.392	.325	.332	.205	.210	.250	1.200	4.300	21.400	7.000	7.300	2.900
5	.392	.300	.310	.215	.215	.255	2.300	4.200	19.400	8.300	6.890	2.920
6	.395	.350	.292	.210	.205	.260	4.280	4.020	17.000	9.700	6.910	2.880
7	.371	.345	.285	.210	.195	.260	6.850	3.840	14.400	11.200	6.760	2.810
8	.365	.310	.272	.210	.190	.260	9.800	3.720	12.000	13.100	6.470	2.980
9	.374	.305	.278	.210	.190	.265	11.100	3.600	11.200	15.900	6.140	3.230
10	.374	.335	.288	.200	.195	.265	11.900	3.550	14.200	18.800	5.800	3.410
11	.479	.392	.262	.190	.205	.265	12.500	3.480	18.700	20.400	5.620	3.830
12	.617	.449	.243	.185	.210	.270	12.800	3.410	23.500	21.300	5.500	4.050
13	.838	.455	.225	.185	.215	.265	13.200	3.360	26.200	21.700	5.510	4.120
14	1.110	.410	.207	.185	.215	.260	13.700	3.380	27.200	21.800	5.740	4.100
15	1.150	.404	.192	.185	.225	.255	13.900	3.440	27.500	21.600	6.220	4.070
16	.951	.482	.182	.185	.230	.250	14.400	3.770	27.500	20.300	6.700	3.970
17	.782	.500	.177	.180	.220	.250	16.200	4.500	26.000	19.200	7.000	3.810
18	.708	.425	.175	.175	.210	.245	17.500	6.140	24.300	17.800	7.050	3.620
19	.687	.350	.184	.170	.210	.250	17.800	7.900	23.400	16.900	6.830	3.420
20	.690	.335	.182	.165	.210	.265	18.000	9.300	22.900	15.500	6.430	3.250
21	.642	.383	.184	.165	.215	.280	18.000	10.800	22.100	13.800	5.950	3.150
22	.614	.449	.188	.165	.225	.300	17.400	12.000	21.200	16.500	5.510	3.060
23	.560	.473	.188	.170	.225	.320	16.400	12.900	20.000	11.600	5.150	2.970
24	.530	.434	.188	.175	.230	.340	15.200	14.500	18.700	12.700	4.840	2.920
25	.512	.401	.194	.180	.230	.360	13.500	18.600	17.200	11.800	4.550	2.860
26	.494	.383	.203	.185	.230	.390	11.600	22.400	15.500	12.200	4.280	2.830
27	.482	.338	.203	.185	.230	.420	9.500	24.000	13.100	12.400	4.000	2.800
28	.467	.280	.201	.185	.235	.510	7.650	24.500	11.300	12.600	3.710	2.780
29	.464	.330	.200	.190		.560	6.200	24.600	10.000	12.200	3.420	2.760
30	.458	.305	.200	.195		.550	5.200	24.400	8.300	11.600	3.240	2.740
31	.446		.200	.200		.600		23.400		11.000	3.110	

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
ALEXANDRIA, LOUISIANA 42

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	28.0	6.9	7.6	1.8	22	2.1	7.1	.1	153	80	184	30	320	95	.2	529	-
10	9	61	-	7.2	7.6	1.4	22	2.8	8.1	.1	115	64	133	30	142	60	.3	399	4000
10	16	61	22.0	7.8	7.3	1.1	19	2.9	6.1	.1	133	62	100	40	142	30	.2	-	5500
10	23	61	-	8.0	7.7	1.3	20	2.4	6.7	.1	215	83	236	20	154	139	.1	703	17000
10	30	61	21.0	8.5	7.7	1.4	18	2.0	6.4	.0	292	91	310	10	150	193	.2	981	16000
11	6	61	-	8.7	7.9	1.5	21	2.1	7.4	.0	230	118	281	20	215	140	.3	730	9300
11	13	61	18.0	9.1	7.7	-	19	3.0	8.0	.1	205	117	246	20	135	118	.3	716	33000
11	27	61	16.0	6.6	7.5	-	36	.6	8.6	.2	128	65	146	30	640	60	.1	413	39000
12	4	61	-	8.4	7.3	-	31	3.1	10.2	.2	67	52	101	50	850	36	.2	266	20000
12	11	61	14.0	8.6	7.5	-	28	3.6	10.4	.1	111	53	129	50	700	64	.2	391	3300
12	18	61	14.0	10.2	7.5	-	33	3.8	-	.2	38	44	71	80	570	19	.2	166	26000
1	8	62	9.0	10.2	7.6	-	25	3.4	8.6	.1	49	49	88	50	355	26	.2	222	25000
1	22	62	9.0	11.2	7.6	-	24	3.4	8.8	.1	61	47	99	40	320	34	.2	263	10000
1	29	62	9.0	9.6	7.5	1.0	33	3.7	9.6	.2	48	48	87	60	700	31	.2	224	22000
2	5	62	13.0	8.1	7.9	1.2	30	3.6	8.0	.1	26	43	70	80	810	18	.2	148	4800
2	12	62	13.0	9.6	7.7	-	12	3.0	8.8	.1	46	47	77	60	180	24	.2	203	14000
2	18	62	16.0	8.5	7.4	-	22	2.9	8.4	.1	51	61	97	40	270	29	.2	222	-
2	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17000
2	26	62	19.0	8.3	7.6	-	21	3.4	9.4	.2	54	54	95	50	335	31	.1	233	11000
3	5	62	12.0	8.8	7.7	-	31	3.5	9.6	.2	30	47	72	100	600	15	.2	148	11000
3	12	62	13.0	9.4	7.4	-	22	3.0	8.0	.1	34	47	69	60	325	16	.2	159	11000
3	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6000
3	23	62	13.0	9.4	7.8	-	22	2.9	8.6	.1	35	53	77	50	300	16	.2	172	-
3	26	62	17.0	8.8	7.6	-	22	3.0	9.0	.2	47	63	88	50	350	23	.2	214	11000
4	2	62	16.0	8.6	7.7	-	22	2.7	7.7	.1	55	64	101	40	510	36	.2	238	14000
4	9	62	17.0	8.4	7.8	-	28	2.9	9.2	.1	29	53	67	60	540	15	.1	167	67000
4	16	62	20.0	7.8	7.6	-	23	3.0	8.6	.1	55	51	88	50	215	30	.1	219	6300
4	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6000
4	30	62	24.0	6.6	7.9	-	26	3.0	8.8	.2	54	63	97	40	540	29	.1	228	15000
5	7	62	24.0	6.1	7.7	-	26	3.8	9.6	.1	27	51	65	80	325	11	.1	141	6000
5	14	62	27.0	6.6	7.7	-	21	3.5	7.8	.1	40	55	74	50	320	16	.1	176	7000
5	21	62	29.0	6.7	7.8	-	18	3.4	7.9	.1	63	84	122	40	86	35	.1	267	2500
5	28	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3500
6	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3300
8	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2000
8	27	62	31.0	6.9	7.7	2.1	30	3.7	9.2	.2	284	132	362	20	60	181	.1	985	2000
9	10	62	30.0	7.3	7.9	2.6	19	3.0	8.8	.1	273	130	299	30	102	145	.1	815	4300
9	17	62	30.0	4.9	7.6	-	34	2.9	7.7	.1	70	87	136	30	610	50	.1	305	2700
9	24	62	28.0	6.5	7.8	-	23	1.9	5.8	.1	47	87	118	20	490	27	.1	249	13000

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
ALEXANDRIA, LOUISIANA 42

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	13	5	5	2	3	7	6	34	14	13	12	47	18						
10	9	61	10	24	-	-	-	-	-	-	5	13	14	13	19	18						
10	16	61	10	30	-	-	-	-	-	-	12	8	8	7	20	11						
10	23	61	11	2	-	-	-	-	-	-	19	25	0	26	19	36						
10	30	61	11	10	-	-	-	-	-	-	0	23	32	32	32	39						
11	6	61	11	16	2	3	0	3	2	4	36	19	38	21	74	28						
11	13	61	11	24	-	-	-	-	-	-	10	23	41	27	51	35						
11	20	61	11	30	-	-	-	-	-	-	17	12	28	14	45	18						
11	27	61	12	7	-	-	-	-	-	-	116	24	22	14	138	28						
12	4	61	12	14	7	4	2	1	9	4	43	9	20	6	63	11						
12	11	61	1	4	19	10	1	2	20	10	172	20	30	10	202	22						
12	18	61	1	5	-	-	-	-	-	-	36	6	35	6	71	8						
1	8	62	1	18	1	1	1	1	2	1	55	7	45	6	100	9						
1	17	62	2	7	-	-	-	-	-	-	37	9	34	8	71	12						
1	22	62	2	2	-	-	-	-	-	-	19	6	43	8	62	10						
1	29	62	2	9	-	-	-	-	-	-	86	13	32	8	118	15						
2	5	62	2	16	6	4	0	1	6	4	108	10	49	6	157	12						
2	12	62	2	23	-	-	-	-	-	-	72	10	29	7	101	12						
2	19	62	3	1	-	-	-	-	-	-	42	7	36	8	78	11						
2	26	62	3	12	-	-	-	-	-	-	58	9	37	8	95	12						
3	5	62	3	19	6	8	0	1	6	8	102	23	39	7	141	24						
3	12	62	3	26	-	-	-	-	-	-	105	12	37	7	142	14						
3	19	62	4	3	-	-	-	-	-	-	101	10	35	6	136	12						
3	26	62	4	11	-	-	-	-	-	-	81	10	34	8	115	13						
4	2	62	4	17	6	5	0	1	6	5	153	20	41	8	194	22						
4	9	62	4	24	-	-	-	-	-	-	175	20	22	7	197	21						
4	16	62	4	30	-	-	-	-	-	-	96	16	51	8	147	18						
4	23	62	5	28	-	-	-	-	-	-	44	9	25	9	69	13						
4	30	62	6	20	-	-	-	-	-	-	96	22	35	9	131	24						
5	7	62	6	12	11	5	0	1	11	5	121	23	32	9	153	25						
5	14	62	6	22	-	-	-	-	-	-	31	10	31	9	62	13						
5	21	62	6	26	-	-	-	-	-	-	14	10	28	10	42	14						
5	28	62	6	29	-	-	-	-	-	-	3	7	25	8	28	11						
6	4	62	6	7	2	1	1	2	3	2	51	10	49	10	100	14						
6	11	62	7	9	-	-	-	-	-	-	82	36	37	8	119	37						
6	18	62	7	17	-	-	-	-	-	-	128	40	21	26	149	48						
6	25	62	7	23	-	-	-	-	-	-	35	37	48	36	83	52						
7	2	62	9	7	5	4	2	5	7	7	11	33	12	35	23	48						
7	16	62	8	8	-	-	-	-	-	-	4	11	22	16	26	19						
7	23	62	8	9	-	-	-	-	-	-	11	22	44	27	55	35						
7	27	62	8	20	-	-	-	-	-	-	0	11	51	14	51	18						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE LOUISIANA

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN LOWER RED RIVER BELOW DENISON

STATION LOCATION RED RIVER AT
ALEXANDRIA, LOUISIANA 42

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
8	10	62	9	26	0	2	3	4	3	4	12	21	54	29	66	36						
8	13	62	8	29	1	3	0	3	1	4	0	28	112	36	112	46						
8	20	62	9	5	-	-	-	-	-	-	8	19	4	27	12	33						
8	27	62	9	14	-	-	-	-	-	-	9	32	35	43	44	54						
9	17	62	10	10	0	4	1	2	1	4	154	66	20	14	174	67						
9	24	62	10	17	-	-	-	-	-	-	31	16	17	8	48	18						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE LOUISIANA
MAJOR BASIN SOUTHWEST—LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
ALEXANDRIA, LOUISIANA 42

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	2500	40	0	290	0	100	0	1140	950	230	310	68	3	88	2	71	1														
10	16	61	2700	0	0	350	0	310	40	500	1510	210	460	88	2	83	2	68	1	71	1	35	1	52	1	86	1						
10	31	61	9300	40	0	5400	0	290	250	700	2590	120	500	35	5	83	3	68	2	97	2	86	2	44	2	38	2	65	1	88	1	98	1
11	14	61	9200	250	0	2190	0	1520	0	1700	3540	670	1210	83	4	66	4	51	3	57	3	27	2	92	2	88	2	38	2	45	2	35	2
12	1	61	00	0	0	0	0	0	0	0	40	0	30																				
12	15	61	300	0	0	20	0	40	20	120	120	20	40																				
12	29	61	300	0	0	20	0	110	20	70	70	20	50																				
1	17	62	300	0	0	50	0	50	20	70	90	20	70																				
2	1	62	100	0	0	0	0	20	0	0	40	0	20																				
2	15	62	1600	0	0	150	0	310	290	370	460	210	0	51	2	60	1	92	1	84	1	68	1										
3	1	62	200	0	0	20	0	40	20	0	100	20	40																				
3	15	62	700	0	0	290	0	60	40	230	80	60	20	33	1																		
3	31	62	700	0	0	70	0	20	0	320	340	20	180	69	1	92	1																
4	16	62	700	0	20	320	0	60	0	110	190	150	190																				
5	1	62	500	0	0	40	0	0	0	210	250	40	510																				
5	15	62	4600	0	0	420	170	110	20	2450	1390	420	420	71	4	38	1	35	1	50	1	69	1										
6	1	62	3900	0	40	130	110	0	0	2030	1560	1350	380	68	4	69	1	71	1														
6	14	62	800	0	0	40	0	120	20	350	270	80	150	69	1																		
6	28	62	1100	80	0	150	0	330	20	100	440	20	40	57	1																		
7	13	62	7200	80	210	720	0	340	0	3460	2360	510	1060	68	4	88	4	92	2	71	1	52	1	17	1	38	1	69	1				
8	13	62	102500	80380	190	5200	210	270	80	3310	12830	410	620	4	9	92	6	2	5	83	5	44	4	67	4	88	4	68	3	38	2	35	2
8	15	62	60700	1660	38790	7990	0	1780	120	3350	6960	1490	750	22	9	83	5	35	5	25	4	51	4	67	4	92	4	88	4	68	3	3	3
8	31	62	13400	0	2030	1760	0	680	0	730	8200	120	370	88	5	17	4	87	3	86	3	83	3	25	3	51	3	67	2	11	2	92	2
9	14	62	220400	340	*	1730	0	340	0	970	3670	510	1310	16	9	83	4	87	4	88	3	67	3	26	2	38	2	40	1	51	1	86	1
9	28	62	4400	180	20	1170	0	270	0	1800	920	790	290	68	4	88	2	26	1	25	1	35	1	51	1	3	1	71	1	87	1		
*9	14	62			213320																												

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
ALEXANDRIA, LOUISIANA 042

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	26	54	68	8	58	5	56	4	29	0	0	1											3							0	0
10	16	61	38	14	58	11	68	9	26	6	60	0	0	0											0							0	0
10	31	61	38	21	97	12	54	9	26	8	50	0	0	1											0							0	0
11	14	61	38	30	26	19	92	6	23	4	41	50	0	0											0							0	0
12	1	61										0	0	0											0							0	0
12	15	61										0	0	0											0							0	0
12	29	61										180	0	2											2							0	0
1	17	62	47	60	92	9	80	5	79	3	23	90	0	0											0							0	0
2	1	62										0	0	0											0							0	0
2	15	62										170	0	0											0							0	0
3	1	62										60	0	0											0							0	0
3	15	62	92	18	62	8	26	3	52	2	69	40	0	0											0							0	0
3	31	62	92	23	56	13	43	8	80	5	51	20	0	3											0							0	0
4	16	62	92	19	58	11	71	7	36	5	68	0	10	0											7	76	2					0	0
5	1	62	92	23	9	14	13	5	71	5	53	0	0	0											0							0	0
5	15	62	80	74	58	18	56	4	57	1	3	20	0	2											3							0	0
6	1	62	56	43	58	33	29	16	92	2	6	0	0	12	8	1									2							0	0
6	14	62	26	25	58	18	56	12	80	6	39	20	0	0											0							0	0
6	28	62	58	13	26	9	92	7	73	6	65	0	0	1											0							0	0
7	13	62	56	38	58	34	26	12	68	3	13	40	0	0											0							0	0
8	13	62	18	30	91	27	26	16	82	4	23	0	0	2600	11	8	22	8	17	7	7	6	15	5	60	50	5					0	0
8	15	62	18	30	36	26	26	23	91	8	13	0	0	1100	11	7	22	6	17	6	7	5	2	2	3	50	1					0	0
8	31	62	18	49	26	21	68	10	38	3	17	0	0	99	11	4	17	3	15	1					0							0	0
9	14	62	18	52	26	17	56	7	38	6	18	0	0	518	11	7	2	4	17	2	16	1	15	1	6	50	2					0	3
9	28	62	26	49	18	19	82	6	68	5	21	0	0	64	11	3	2	3	17	1					0							0	0

687-228 O-63—42

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Alexandria, Louisiana
Operated by U.S. Army Corps of Engineers

STATE	Louisiana
MAJOR BASIN	Southwest-Lower Mississippi River
MINOR BASIN	Lower Red River below Denison
STATION LOCATION	Red River At Alexandria, Louisiana

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	9.500	9.100	76.900	51.600	92.500	74.800	44.600	77.600	10.700	29.800	7.000	6.100
2	9.100	8.600	69.100	48.900	92.000	78.800	45.100	88.900	10.900	27.400	6.900	6.200
3	9.900	8.600	61.800	46.900	89.800	78.000	44.900	93.900	9.900	24.000	6.700	6.300
4	14.200	8.700	53.800	46.200	85.100	74.400	41.500	92.600	9.800	21.200	6.800	6.200
5	18.500	8.900	47.400	46.500	80.200	72.300	50.400	85.300	10.000	19.800	6.900	6.100
6	21.300	9.100	42.200	46.700	74.500	69.500	53.800	72.200	10.000	19.200	6.900	6.000
7	22.500	9.100	39.100	45.200	69.100	66.500	53.000	69.600	10.300	19.800	7.000	6.000
8	23.100	8.900	37.600	43.200	63.200	62.800	49.500	62.800	15.100	20.000	6.900	7.200
9	23.100	8.600	38.400	41.100	57.900	58.500	45.600	55.500	24.400	18.800	6.900	8.700
10	22.800	8.300	45.400	39.400	52.700	54.700	43.600	48.400	25.400	16.400	7.300	9.300
11	22.500	8.700	58.500	37.900	48.500	52.000	38.500	41.300	22.500	14.300	8.000	9.700
12	21.300	9.900	76.900	37.100	45.100	47.800	39.000	36.200	21.100	13.200	8.400	9.900
13	20.200	11.800	95.800	36.100	41.600	48.800	43.000	32.500	22.600	13.000	8.100	13.000
14	18.000	14.000	103.000	35.400	38.700	50.700	45.400	29.700	30.900	12.700	7.500	24.300
15	16.400	14.200	108.000	35.200	37.200	52.400	43.900	26.800	39.200	12.500	6.600	28.800
16	14.500	13.500	109.000	39.400	35.600	51.800	40.800	24.500	50.500	12.000	6.200	26.800
17	13.200	12.800	110.000	44.600	34.300	48.800	36.600	22.900	57.400	11.200	6.000	22.700
18	12.300	12.300	113.000	49.200	33.600	47.100	32.300	21.600	57.300	10.300	6.000	19.300
19	13.000	11.800	112.000	53.800	36.000	41.500	30.100	20.500	54.200	9.800	6.100	16.000
20	15.000	11.400	112.000	56.600	42.400	37.900	28.200	19.600	49.700	9.700	6.200	13.700
21	19.100	11.200	112.000	57.100	46.100	35.900	26.600	18.800	42.400	9.600	6.100	12.200
22	19.300	12.300	108.000	55.900	47.600	34.100	26.000	17.800	42.200	9.200	6.000	11.400
23	18.000	17.700	107.000	54.300	46.900	33.000	28.700	16.600	38.200	8.800	5.800	11.200
24	16.100	25.600	101.000	54.300	45.700	31.500	30.600	15.500	36.600	8.300	5.700	10.800
25	14.700	34.700	93.400	55.900	45.700	30.100	31.500	14.300	35.100	7.800	5.700	10.500
26	13.700	43.800	85.600	59.900	48.500	30.000	34.200	13.200	32.900	7.200	6.000	10.100
27	13.500	58.500	78.400	67.700	55.000	31.000	36.900	12.300	30.500	6.700	6.000	10.000
28	13.200	72.200	71.700	77.200	64.800	31.200	43.700	11.600	28.900	6.800	6.000	10.300
29	12.300	80.200	65.400	82.800		31.000	61.800	11.000	28.500	7.100	6.200	10.600
30	11.400	83.500	60.000	87.700		34.400	70.000	10.500	29.700	7.500	6.400	12.100
31	10.100		55.300	92.800		40.300		10.300		7.500	6.100	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
BOSSIER CITY, LOUISIANA 118

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMI-NATION		ALPHA						BETA						DATE OF DETERMI-NATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
6	18	62	7	17	32	15	4	5	36	16	74	41	25	32	99	52						
6	26	62	7	24	11	7	7	5	18	9	62	33	31	28	93	43						
7	3	62	7	31	2	4	1	5	3	6	45	31	53	32	98	45						
7	12	62	8	14	0	1	0	1	0	1	38	25	36	27	74	37						
7	24	62	8	9	0	5	1	5	1	7	0	29	49	33	49	44						
7	31	62	8	17	1	2	3	4	4	4	17	21	27	28	44	35						
8	7	62	8	28	1	2	3	4	4	4	0	45	53	26	53	47						
8	14	62	8	31	1	2	0	1	1	2	21	13	87	17	108	21						
8	21	62	10	12	0	6	1	8	1	10	48	53	82	62	130	82						
9	4	62	9	21	2	3	3	5	5	6	18	44	61	33	79	55						
9	11	62	10	6	5	3	1	3	6	4	19	26	479	38	498	46						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE LOUISIANA
MAJOR BASIN SOUTHWEST—LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
BOSSIER CITY, LOUISIANA 118

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
6	18	62	500	0	0	80	0	60	0	150	250	20	60																				
7	3	62	7200	80	0	1430	80	460	100	410	4580	290	250	88	4	38	2	51	2	25	2	35	1	71	1	84	1	92	1				
7	17	62	13500	590	0	2030	250	210	130	7640	2660	2620	1060	67	6	92	3	86	3	88	3	69	2	40	2	38	2	25	2	2	2	35	1
7	31	62	11500	990	950	2940	80	1010	60	1950	3520	460	210	83	4	3	3	67	3	38	3	92	3	51	3	11	3	68	2	88	2	69	2
8	14	62	9200	100	20	4180	0	370	210	1780	2480	580	330	38	5	83	4	67	3	68	3	87	1	88	1	51	1	63	1				
9	11	62	20500	40	40	1160	0	420	0	3330	15530	1060	2950	88	6	67	4	38	2	86	2	51	2	69	2	40	1	83	1				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE LOUISIANA

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN LOWER RED RIVER BELOW DENISON

STATION LOCATION RED RIVER AT

BOSSIER CITY, LOUISIANA 118

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
6	18	62										20	0	0											1							0	0
7	3	62	80	14	26	9	58	8	48	7	62	0	0	0											0							0	0
7	17	62	20	56	56	18	58	15	92	2	9	40	0	1											0							0	0
7	31	62	18	30	38	19	26	18	91	9	24	0	0	566	11	7	17	4	22	3	2	3	15	2	2							0	0
8	14	62	18	39	26	21	38	17	23	4	19	0	0	3											0							0	0
9	11	62	18	13	26	10	54	10	58	7	60	0	0	-											-							-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL. PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE LOUISIANA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
BOSSIER CITY, LOUISIANA 118

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	18	62	-	-	7.4	-	-	-	-	-	267	112	320	5	25	175	-	863	-
6	26	62	-	-	7.7	-	-	-	-	-	201	88	260	10	450	120	.0	707	1000
7	3	62	-	-	-	-	-	-	-	-	250	112	288	15	250	165	.0	862	500
7	10	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
7	17	62	-	-	-	-	-	-	-	-	175	132	252	5	65	120	.0	622	100
7	24	62	-	-	-	-	-	-	-	-	285	136	348	0	25	190	.0	916	100
7	31	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
8	7	62	-	-	7.9	-	-	-	-	-	209	136	320	-	52	125	.0	749	*100
8	14	62	-	-	-	-	-	-	-	-	136	128	228	5	-	105	.0	563	*100
8	21	62	-	-	-	-	-	-	-	-	292	144	344	5	-	195	.0	987	-
9	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
9	11	62	-	-	-	-	-	-	-	-	206	112	260	5	150	145	.0	700	5000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Shreveport, Louisiana
Operated by U.S. Geological Survey

STATE	Louisiana
MAJOR BASIN	Southwest-Lower Mississippi River
MINOR BASIN	Lower Red River below Denison
STATION LOCATION	Red River at Bossier City, Louisiana

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	6.170	5.230	55.300	28.200	78.600	70.300	33.500	55.200	4.380	20.500	6.800	6.140
2	11.400	5.790	47.800	27.500	70.300	69.000	27.500	63.700	5.040	17.900	6.240	5.920
3	13.500	5.980	39.000	28.200	63.700	63.700	32.100	61.000	5.260	16.500	7.020	5.260
4	15.300	5.980	31.100	28.200	56.300	59.700	47.000	53.100	5.700	16.100	7.240	4.380
5	16.600	5.790	26.500	28.200	49.900	55.200	47.800	43.700	6.580	17.900	7.020	5.700
6	17.000	5.420	24.800	26.900	42.900	51.000	43.700	39.600	12.600	18.700	7.020	7.460
7	17.000	5.040	23.600	25.600	36.900	46.200	36.900	35.500	25.600	16.100	7.460	7.900
8	16.600	5.420	22.500	23.900	33.500	42.100	32.800	28.800	25.600	13.900	9.220	8.340
9	17.000	7.500	25.400	22.800	30.800	37.600	28.800	24.500	20.500	12.900	9.880	9.000
10	15.300	8.900	36.300	22.200	28.800	34.800	26.200	21.600	17.000	12.100	9.000	9.220
11	13.900	9.100	43.700	22.200	26.900	34.200	25.100	20.100	16.100	11.800	7.900	9.440
12	11.700	7.310	52.100	21.100	25.100	34.200	27.500	18.300	25.600	11.200	7.020	28.200
13	9.500	5.980	57.500	20.500	23.400	38.200	26.900	16.500	32.800	11.500	5.920	33.500
14	8.700	5.230	60.800	18.700	21.600	38.200	22.200	15.500	36.200	10.700	5.700	28.200
15	7.900	5.230	62.900	18.300	19.600	34.200	19.600	14.800	48.900	9.880	6.360	21.600
16	7.310	5.980	60.800	23.400	17.900	31.500	17.400	14.500	55.200	9.000	6.800	17.900
17	7.700	6.170	65.100	26.900	17.900	26.900	16.100	14.200	53.100	9.000	6.800	14.800
18	13.500	6.170	67.300	34.200	27.500	25.600	15.500	13.900	47.000	9.000	6.800	12.900
19	18.100	6.930	65.100	33.500	33.500	23.400	15.500	13.500	44.500	9.000	6.140	12.100
20	17.000	8.700	64.000	33.500	33.500	22.200	15.800	12.900	38.900	8.120	5.260	11.800
21	14.800	9.500	64.000	32.800	34.200	21.600	18.700	12.100	34.800	7.460	4.820	11.200
22	12.300	10.100	61.800	30.200	28.800	20.500	22.800	10.900	34.200	6.800	5.040	10.900
23	11.000	18.100	55.300	27.500	25.100	20.100	23.400	9.880	32.800	5.700	5.700	10.100
24	10.700	22.500	48.900	31.500	31.500	20.100	22.200	9.000	30.200	5.260	5.700	9.660
25	10.400	35.400	43.700	36.200	35.500	22.200	22.800	8.560	2.750	5.480	5.920	9.660
26	10.400	64.000	39.000	44.500	46.200	23.900	21.100	8.120	25.100	6.140	5.920	10.700
27	9.100	76.500	35.400	56.300	54.200	22.800	26.900	7.240	24.500	7.020	5.040	10.700
28	8.100	81.100	33.200	63.700	65.000	24.500	42.900	6.580	25.600	7.240	4.380	10.400
29	6.930	75.300	31.100	71.600		32.800	47.800	5.480	29.500	7.460	4.380	10.100
30	5.980	65.100	29.600	81.300		36.900	47.800	5.260	25.100	6.580	5.700	9.220
31	5.420		28.200	84.100		38.200		4.380		6.360	6.140	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ARKANSAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
INDEX, ARKANSAS 43

DATE OF SAMPLE MONTH	DAY	YEAR	ALGAE (Number per milliliter) TOTAL	BLUE-GREEN COCCOID	BLUE-GREEN FILAMENTOUS	GREEN COCCOID	GREEN FILAMENTOUS	FLAGELLATED (Pigmented) GREEN	FLAGELLATED (Pigmented) OTHER	DIATOMS CENTRIC	DIATOMS PENNATE	INERT DIATOM SHELLS CENTRIC	INERT DIATOM SHELLS PENNATE	MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) 1ST GENUS	1ST COUNT LEVEL	2ND GENUS	2ND COUNT LEVEL	3RD GENUS	3RD COUNT LEVEL	4TH GENUS	4TH COUNT LEVEL	5TH GENUS	5TH COUNT LEVEL	6TH GENUS	6TH COUNT LEVEL	7TH GENUS	7TH COUNT LEVEL	8TH GENUS	8TH COUNT LEVEL	9TH GENUS	9TH COUNT LEVEL	10TH GENUS	10TH COUNT LEVEL
10	2	61	4600	410	330	1020	0	100	0	370	2400	120	440	1	2	87	2	99	2	12	2	25	1	97	1	88	1	35	1	38	1	98	1
10	16	61	6200	0	0	1160	0	130	0	560	4330	100	520	97	3	87	3	35	3	71	2	88	2	98	2	83	2	99	1	92	1	86	1
11	6	61	11200	60	0	2940	0	930	0	2050	5240	1490	1080	83	4	68	4	35	3	38	3	97	3	45	2	71	2	69	2	44	2	98	2
11	20	61	10200	0	•20	1350	0	1240	2170	2380	3040	190	520	65	4	51	4	69	3	71	3	97	3	87	2	27	2	38	1	83	1	98	1
11	29	61	200	0	0	20	0	40	20	20	50	20	220																				
12	16	61	600	0	50	50	0	270	0	50	180	20	90	51	1																		
1	10	62	8400	180	90	1200	0	2810	70	3650	410	340	0	71	5	57	3	51	3	35	2	25	1	68	1								
1	25	62	800	20	20	100	0	230	0	120	330	20	80																				
2	7	62	6200	770	0	700	0	1640	90	2480	560	200	140	51	4	3	3	25	2														
2	21	62	13100	1450	80	3970	0	3210	80	2860	1490	870	500	25	5	51	4	92	4	2	3	57	3	82	3	44	2	83	2	5	1		
3	7	62	1100	40	0	100	0	190	150	390	250	20	120																				
3	21	62	7300	310	0	1390	0	1990	170	1620	1840	580	290	92	4	71	4	51	4	25	3	57	3	3	1	88	1						
4	4	62	1300	0	0	0	0	130	0	60	1060	0	370	92	2	88	1																
4	17	62	4100	150	0	1490	0	1240	20	440	750	40	230	35	4	51	3	57	2	71	1	92	1										
5	1	62	600	0	0	20	0	20	60	60	460	40	80	92	1																		
5	16	62	10500	40	680	2980	40	400	230	3760	2450	1750	2320	71	4	68	3	38	3	35	3	17	3	83	2	88	2	30	2	25	2	57	2
5	30	62	18700	40	1390	4680	210	40	0	5110	7260	1520	1560	68	5	88	5	83	4	35	4	71	4	16	3	30	3	87	3	92	3	24	2
6	12	62	700	0	0	100	0	20	0	100	440	0	20																				
6	26	62	1400	210	0	540	0	60	0	120	480	0	20	38	1	3	1																
7	10	62	28700	130	0	7170	0	130	0	7260	13970	2450	2830	88	6	67	5	92	5	38	5	35	4	68	3	40	3	45	3	71	3	26	2
7	24	62	10500	410	120	2110	290	270	0	2940	4390	1490	460	88	4	67	4	68	3	38	2	74	2	35	2	87	2	50	1	71	1	51	1
8	14	62	10400	130	210	2980	0	250	40	910	5880	460	1160	88	4	25	4	68	3	35	3	74	3	38	2	30	2	67	1	12	1	83	1
8	28	62	19400	380	210	2110	0	130	0	3630	12910	680	2150	83	6	68	5	88	5	87	4	38	3	71	3	1	1	35	1	30	1	40	1
9	11	62	100	0	0	10	0	0	0	20	30	10	360																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ARKANSAS

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN LOWER RED RIVER BELOW DENISON

STATION LOCATION RED RIVER AT

INDEX, ARKANSAS 043

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH					NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	38	22	97	12	98	8	73	3	55	0	10	3											0							0	0
10	16	61	97	12	98	12	58	8	38	7	61	0	0	1											3							0	0
11	6	61	38	22	57	11	58	10	55	9	48	0	0	0											0							0	0
11	20	61	97	21	38	8	73	7	11	6	58	0	0	0											0							0	0
11	29	61										0	0	0											0							0	0
12	16	61										430	0	0											0							0	0
1	10	62	80	47	97	6	92	5	38	4	38	230	0	3											0							0	0
1	25	62	92	26	71	6	73	6	55	6	56	0	0	1											1							0	0
2	7	62	92	26	82	11	70	8	58	4	61	0	0	2											5	76	1					0	0
2	21	62										170	0	2											0							0	0
3	7	62										0	0	0											1							0	0
3	21	62	92	42	80	15	82	10	71	5	28	0	0	3											0							1	0
4	4	62	92	33	36	7	71	5	86	3	52	20	0	0											4	50	1					0	0
4	17	62	56	36	80	13	9	13	92	11	27	0	0	1											3	76	1					0	0
5	1	62	92	17	36	7	71	5	73	4	67	0	0	0											2							0	0
5	16	62	80	26	26	18	38	5	71	3	48	0	0	123	2	5	11	2	17	1					49	50	4	51	3	76	2	0	0
5	30	62	26	43	80	19	23	14	38	7	17	170	0	89	17	4	2	3							21	50	3					0	2
6	12	62	92	13	71	8	12	7	78	6	66	0	0	0											1							0	0
6	26	62	73	18	92	15	75	13	71	8	46	0	0	0											0							0	0
7	10	62	18	17	89	16	26	13	61	10	44	80	0	14	2	1	17	1							0							0	0
7	24	62	20	38	26	16	71	9	82	5	32	0	0	406	2	5	11	5	17	4	7	3	22	3	6	50	1					0	0
8	14	62	4	13	71	9	26	7	18	6	65	0	0	433	11	6	17	5	2	5	22	3	7	3	0							0	0
8	28	62	26	22	38	16	69	8	82	8	46	0	0	369	11	6	17	4	2	4	21	2	18	2	0							0	0
9	11	62	69	11	65	8	38	7	72	6	68	0	0	-											-							-	-

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE ARKANSAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
INDEX, ARKANSAS 43

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	16	-	-	-	-	-	-	0	29	28	34	28	45						
10	9	61	10	18	7	4	1	2	8	4	46	15	15	11	61	19						
10	16	61	10	25	-	-	-	-	-	-	69	29	137	30	206	42						
12	16	61	12	29	3	2	1	1	4	2	124	9	24	5	148	10						
12	28	61	1	8	-	-	-	-	-	-	51	24	83	28	134	37						
1	10	62	1	19	0	2	1	3	1	4	78	20	36	21	114	29						
1	17	62	1	31	-	-	-	-	-	-	131	32	40	35	171	47						
1	25	62	2	7	-	-	-	-	-	-	57	14	23	14	80	20						
1	31	62	2	12	-	-	-	-	-	-	247	13	95	9	342	16						
2	7	62	2	19	-	-	-	-	-	-	22	21	63	26	85	33						
2	20	62	3	5	-	-	-	-	-	-	44	22	30	26	74	34						
4	17	62	5	22	-	-	-	-	-	-	42	29	60	32	102	49						
5	1	62	6	8	-	-	-	-	-	-	141	23	50	9	191	25						
5	30	62	6	29	1	2	4	4	5	4	13	22	39	27	52	35						
6	12	62	7	9	8	7	0	1	8	7	95	44	16	9	111	45						
7	24	62	8	21	0	2	2	5	2	5	26	26	49	34	75	43						
8	14	62	9	6	0	2	1	5	1	6	0	58	11	32	11	66						
8	28	62	10	24	-	-	-	-	-	-	8	33	8	36	16	48						
9	11	62	10	1	22	14	1	1	23	14	82	92	25	10	107	93						

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	ARKANSAS
MAJOR BASIN	SOUTHWEST LOWER MISSISSIPPI RIVER
MINOR BASIN	LOWER RED RIVER BELOW DENISON
STATION LOCATION	RED RIVER AT INDEX, ARKANSAS 43

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	21.0	7.4	8.0	1.0	-	3.8	6.7	-	167	120	130	70	65	-	-	-	2700
10	9	61	20.0	8.8	7.7	1.6	-	4.7	11.7	-	80	77	158	60	250	-	-	-	6000
10	16	61	20.0	6.6	7.9	2.0	-	4.2	8.2	-	140	95	300	40	200	-	-	-	-
10	23	61	18.5	10.0	8.1	2.4	-	-	-	-	224	115	420	80	155	-	-	-	2000
10	30	61	19.0	9.6	8.0	1.4	-	-	-	-	180	124	163	75	165	-	-	-	100
11	6	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140
11	13	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140
11	20	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240
11	29	61	-	-	7.4	-	46	-	-	-	111	54	166	30	204	65	.0	364	820
12	16	61	-	-	-	-	-	-	-	-	-	-	-	-	-	65	.2	-	-
12	28	61	-	-	7.2	-	27	-	-	-	251	88	242	20	58	215	.0	699	-
2	8	62	-	-	7.5	-	33	-	-	-	203	95	186	15	54	200	.0	665	-
2	23	62	-	-	7.5	-	45	-	-	-	191	96	246	20	108	175	.0	638	-
7	25	62	-	-	7.3	-	-	-	-	-	300	110	352	25	-	245	.0	980	-
8	14	62	-	-	8.0	-	-	-	-	-	348	82	373	55	100	240	.0	1043	-
8	28	62	-	-	8.2	-	-	-	-	-	430	114	390	35	100	210	.0	1114	-
9	11	62	-	-	7.7	-	-	-	-	-	60	120	152	25	1000	40	-	295	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Index, Arkansas
Operated by U.S. Geological Survey

STATE Arkansas

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Lower Red River below Denison

STATION LOCATION Red River at
Index, Arkansas

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	4.100	4.520	21.800	7.360	15.900	18.400	12.100	30.600	1.800	12.700	5.200	2.620
2	4.700	3.940	17.900	7.600	12.500	14.500	26.400	25.800	2.110	13.800	4.830	4.350
3	5.460	3.210	14.800	7.360	10.700	12.500	30.000	20.100	3.710	15.900	4.660	5.400
4	6.060	3.000	14.100	6.700	9.580	10.700	23.400	15.400	19.100	13.400	5.600	5.600
5	6.480	3.420	13.400	6.060	8.560	9.060	17.500	12.300	24.000	9.000	8.720	6.220
6	8.080	4.880	11.800	5.260	7.840	7.600	14.500	9.600	19.100	7.140	9.300	6.440
7	9.580	6.480	12.100	5.460	7.140	6.260	12.100	8.180	14.200	7.140	7.400	5.800
8	9.320	5.660	17.100	6.060	6.480	5.260	11.800	7.660	10.900	7.400	6.010	5.800
9	7.840	4.180	18.800	6.060	5.260	4.430	12.500	6.440	14.200	7.660	4.500	12.700
10	6.260	3.210	20.200	5.860	4.180	4.700	12.800	5.200	21.200	7.660	3.260	25.800
11	5.260	3.000	23.400	5.060	3.630	6.920	11.500	4.200	22.800	6.440	3.390	32.000
12	5.060	3.630	27.000	4.100	3.490	7.600	8.800	3.600	24.000	5.200	5.010	28.200
13	4.700	3.780	27.000	3.700	3.350	7.140	6.700	4.200	38.800	4.050	5.800	15.400
14	4.520	3.700	24.000	4.700	5.310	6.260	6.060	4.350	48.700	4.500	6.010	10.600
15	10.900	3.700	20.200	8.080	4.280	5.460	6.260	4.050	47.800	5.400	5.800	7.920
16	15.900	4.260	17.900	10.100	6.700	4.340	6.060	3.530	48.600	5.600	4.660	6.900
17	15.900	6.060	17.500	10.900	7.600	3.780	5.860	3.060	42.800	5.600	3.530	6.900
18	13.400	6.700	18.800	10.400	8.560	4.100	6.480	2.430	38.800	5.800	3.600	6.900
19	11.200	6.700	20.200	9.840	8.560	4.340	8.320	2.110	33.900	5.400	4.660	6.440
20	10.100	6.480	20.200	9.320	7.600	4.430	8.560	1.930	33.900	4.200	5.010	5.600
21	9.840	6.480	17.500	9.060	6.700	4.180	9.580	1.990	33.200	3.750	5.010	4.660
22	9.840	7.360	15.200	9.580	6.480	3.700	9.580	2.120	30.600	5.200	5.010	5.200
23	9.840	10.700	13.100	11.200	7.060	3.490	8.080	2.160	28.200	5.800	4.500	5.600
24	8.560	28.400	10.900	13.800	11.200	3.780	7.600	2.120	25.200	5.800	3.320	5.800
25	6.920	47.800	9.580	18.400	15.500	5.260	12.100	2.000	24.600	5.800	3.390	5.800
26	5.460	53.800	8.800	18.400	21.200	7.360	23.400	1.840	26.400	5.010	4.500	5.800
27	4.180	52.100	8.080	21.200	27.000	12.100	27.600	1.790	28.800	4.200	5.010	4.500
28	3.700	41.200	6.920	30.000	24.600	16.700	26.400	1.800	22.300	5.010	5.200	3.460
29	4.430	31.300	5.860	33.200		15.500	27.600	1.800	11.700	6.220	5.200	2.570
30	4.880	25.800	5.060	30.000		11.200	30.000	1.880	14.600	6.440	4.200	2.380
31	4.700		6.060	22.300		10.100		1.800		6.220	2.680	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE TEXAS

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN LOWER RED RIVER BELOW DENISON

STATION LOCATION RED RIVER AT
DENISON, TEXAS 44

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	5	61	10	13	5430	201	48	153	-	-	-	-	-	-	-	-	-	-	-
11	6	61	11	14	5350	213	62	151	-	-	-	-	-	-	-	-	-	-	-
12	4	61	12	11	5030	229	40	189	-	-	-	-	-	-	-	-	-	-	-
12	4	61		*	15810	214	50	164	3	13	12	1	0	10	1	6	5	1	10
1	2	62	1	9	5050	232	66	166	-	-	-	-	-	-	-	-	-	-	-
2	5	62	2	12	5060	201	62	139	-	-	-	-	-	-	-	-	-	-	-
3	5	62	3	12	5030	130	50	80	-	-	-	-	-	-	-	-	-	-	-
3	5	62		*	15140	187	59	128	4	16	17	3	2	11	1	5	4	1	12
4	2	62	4	9	5010	215	69	146	-	-	-	-	-	-	-	-	-	-	-
5	7	62	5	14	5000	215	84	131	-	-	-	-	-	-	-	-	-	-	-
6	9	62	6	16	4980	252	89	163	-	-	-	-	-	-	-	-	-	-	-
6	9	62		*	14990	228	81	147	2	23	17	1	1	14	1	7	11	2	19
7	3	62	7	10	5060	255	100	155	3	29	24	1	1	21	1	12	12	2	18
8	6	62	8	13	5060	229	97	132	9	23	23	3	1	16	3	9	11	1	21
9	6	62	9	14	5340	338	213	125	6	45	53	6	2	43	2	26	23	4	56

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE TEXAS

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN LOWER RED RIVER BELOW DENISON

STATION LOCATION RED RIVER AT

DENISON, TEXAS 44

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMI-NATION		ALPHA						BETA							DATE OF DETERMI-NATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL					ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±		MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	14	-	-	-	-	-	-	1	25	91	42	92	49							
10	9	61	10	27	0	2	0	6	0	6	0	20	10	27	10	34							
10	16	61	10	31	-	-	-	-	-	-	10	49	33	63	43	80							
10	23	61	11	1	-	-	-	-	-	-	0	22	536	32	536	39							
10	30	61	11	9	-	-	-	-	-	-	0	39	0	47	0	61							
11	6	61	11	17	-	-	-	-	-	-	4	26	13	37	17	45							
11	13	61	11	28	0	3	3	7	3	8	4	27	0	38	4	47							
11	20	61	11	30	-	-	-	-	-	-	16	26	40	38	56	46							
11	27	61	12	5	-	-	-	-	-	-	17	27	0	36	17	45							
12	4	61	12	14	-	-	-	-	-	-	0	27	15	38	15	47							
12	11	61	12	22	-	-	-	-	-	-	0	19	15	26	15	32							
12	18	61	12	29	-	-	-	-	-	-	2	22	4	33	6	40							
12	26	61	1	3	-	-	-	-	-	-	24	27	48	38	72	47							
1	2	62	1	23	-	-	-	-	-	-	33	56	0	65	33	86							
1	8	62	1	18	1	3	0	5	1	6	0	20	8	27	8	34							
1	15	62	1	24	-	-	-	-	-	-	73	27	25	38	98	47							
1	22	62	2	2	-	-	-	-	-	-	0	27	20	37	20	46							
1	29	62	2	8	-	-	-	-	-	-	1	53	60	75	61	91							
2	5	62	2	15	-	-	-	-	-	-	22	27	54	37	76	46							
2	12	62	2	20	0	2	1	6	1	6	10	18	84	29	94	34							
2	20	62	3	1	-	-	-	-	-	-	2	26	51	37	53	45							
2	26	62	3	13	-	-	-	-	-	-	6	19	56	28	62	34							
3	5	62	3	20	-	-	-	-	-	-	4	20	13	28	17	34							
3	12	62	3	26	0	2	1	6	1	6	18	20	52	29	70	35							
3	19	62	4	3	-	-	-	-	-	-	34	27	19	34	53	43							
3	26	62	4	6	-	-	-	-	-	-	3	28	41	39	44	48							
4	2	62	4	19	-	-	-	-	-	-	10	26	8	37	18	45							
4	9	62	4	27	1	2	1	5	2	5	27	20	43	27	70	34							
4	16	62	4	30	-	-	-	-	-	-	49	27	30	36	79	45							
4	23	62	5	22	-	-	-	-	-	-	12	33	35	39	47	51							
4	30	62	5	25	-	-	-	-	-	-	0	31	122	46	122	55							
5	7	62	6	11	-	-	-	-	-	-	9	18	93	48	102	51							
5	14	62	6	22	1	2	3	6	4	6	25	25	56	35	81	40							
5	21	62	6	27	-	-	-	-	-	-	10	31	15	39	25	50							
5	28	62	6	29	-	-	-	-	-	-	6	16	34	21	40	26							
6	4	62	7	3	0	2	0	2	0	3	0	35	37	36	37	50							
6	11	62	7	13	1	2	3	5	4	5	32	17	48	22	80	28							
6	18	62	7	17	-	-	-	-	-	-	0	35	27	38	27	52							
6	25	62	7	24	-	-	-	-	-	-	30	27	52	36	82	45							
7	2	62	8	6	-	-	-	-	-	-	17	22	32	29	49	36							
7	16	62	8	14	-	-	-	-	-	-	7	24	60	37	67	44							

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	TEXAS
MAJOR BASIN	SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN	LOWER RED RIVER BELOW DENISON
STATION LOCATION	RED RIVER AT DENISON, TEXAS 44

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
7	23	62	8	15	-	-	-	-	-	-	0	31	39	38	39	49						
7	30	62	8	22	-	-	-	-	-	-	4	25	19	36	23	44						
8	6	62	10	12	-	-	-	-	-	-	5	28	36	33	41	43						
8	13	62	10	13	1	2	3	4	4	4	56	35	180	32	236	47						
8	20	62	9	5	-	-	-	-	-	-	0	23	34	36	34	43						
8	27	62	9	27	-	-	-	-	-	-	9	31	8	45	17	55						
9	4	62	9	27	-	-	-	-	-	-	7	24	28	35	35	42						
9	10	62	10	8	-	-	-	-	-	-	13	46	262	46	275	66						
9	17	62	10	11	-	-	-	-	-	-	656	38	21	31	677	49						
9	24	62	10	22	-	-	-	-	-	-	27	12	22	17	49	21						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TEXAS
MAJOR BASIN SOUTHWEST—LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
DENISON, TEXAS 44

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	2400	40	0	500	0	40	0	150	1700	20	230	83	4	35	1	84	1														
10	16	61	2500	20	0	1580	0	270	0	190	480	40	120	83	2	35	4																
11	6	61	3100	0	0	1080	0	170	0	500	1410	20	170	83	4	35	3																
11	20	61	5500	110	0	1580	0	1100	0	880	1800	380	590	38	7	51	3	35	3	71	2	69	1	57	1	30	1	28	1	44	1	87	1
12	4	61	9400	0	0	1600	0	1350	0	790	5650	50	410	83	5	35	3	51	3	57	2	69	2	38	1	92	1						
12	18	61	3800	0	0	830	0	330	0	580	2110	100	370	83	4	71	2	35	2	51	1												
1	2	62	9100	290	0	2410	0	2790	50	1490	2050	250	270	83	4	35	4	51	4	57	4	68	3	71	3	25	1	1	1	44	1	92	1
1	15	62	9500	1440	50	1220	0	3380	0	860	2570	430	430	83	5	57	4	3	4	51	3	71	3	35	3	25	1						
2	5	62	2000	40	20	390	0	1370	20	0	170	0	190	57	4	35	1																
2	19	62	600	0	50	250	0	160	20	0	160	20	180																				
3	5	62	1400	390	0	460	0	80	80	120	270	170	290	3	2	25	1																
3	19	62	1500	290	0	700	0	150	20	80	210	40	170	35	2	3	1	38	1														
4	2	62	2500	830	0	850	0	370	60	150	210	20	20	3	3	35	2	51	2														
4	16	62	6000	3190	0	2360	0	40	0	150	270	60	120	3	5	35	4	25	1	5	1	83	1										
5	7	62	3300	540	0	2240	0	80	0	270	190	40	0																				
5	21	62	2600	380	110	490	0	210	0	650	690	110	450	35	2	71	1	83	1														
6	4	62	3100	20	0	1240	20	340	90	110	1310	90	610	38	3	35	3	57	1														
6	18	62	4100	700	40	2030	0	460	0	170	750	80	410	35	4	3	2	38	2	83	2	51	2										
7	2	62	2400	80	0	680	0	20	20	510	1060	80	680	83	4	71	2	68	1														
7	16	62	3900	3690	0	80	0	80	0	0	60	0	0	2	5																		
8	6	62	400	0	0	60	0	60	0	40	250	60	0	83	1																		
8	20	62	1700	0	0	80	0	20	0	420	1140	0	460	83	2	92	2	68	1	76	1												
9	4	62	200	10	20	40	0	0	0	0	80	20	80																				
9	17	62	2100	0	0	130	0	0	0	680	1310	210	170	68	3	92	2	83	1	88	1												

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TEXAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
DENISON, TEXAS 044

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS	GENERA AND COUNT LEVEL (See text for Codes)										CRUSTACEA	GENERA AND COUNT LEVEL (See text for Codes)						NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT				NUM-BER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUM-BER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	38	66	26	7	46	7	70	2	18	350	0	5											3							0	0
10	16	61	38	94	25	2	26	1		1	2	0	0	81	11	4	2	1							115	51	5					0	0
11	6	61	38	64	82	15	26	6	92	3	12	150	0	16	11	2									0							0	0
11	20	61	38	94		1		1		1	3	230	0	12	11	1									1							0	0
12	4	61	38	78	26	3	56	2	76	2	15	0	10	14	11	2									2							0	0
12	18	61	38	93	82	2	80	1		1	3	0	10	8											0							0	0
1	2	62	38	87	92	7	76	2	46	1	3	0	30	38	21	3									4	51	1					0	0
1	15	62	38	95	92	3	80	1	97	1		0	20	221	21	6	2	3	11	2					11	76	1	50	1	51	1	0	0
2	5	62										0	10	88	21	4	14	3	2	2	11	1			17	50	2	51	2			0	0
2	19	62										110	0	5											4							0	0
3	5	62										0	0	11	11	2									8	50	1					0	0
3	19	62										0	0	22	11	2	7	1							22	76	3	50	2			0	0
4	2	62	38	26	92	13	91	8	47	8	45	0	10	26	11	2									14	50	2	76	2			0	0
4	16	62	38	42	92	13	80	7	71	4	34	0	10	12	11	1	7	1							20	76	3	50	1			0	0
5	7	62	38	89	80	5	26	2	16	2	2	0	0	13	7	2									10	76	1	52	1			0	0
5	21	62										0	10	3											5	50	1					0	0
6	4	62	38	57	80	17	82	6	26	3	17	0	0	0											0							0	0
6	18	62	38	58	80	9	56	3	26	2	28	0	10	10	17	1									13	51	2					0	0
7	2	62	38	33	71	12	80	9	26	5	41	0	10	26	11	2	17	1							7	51	1					0	0
7	16	62										0	0	0											0							0	0
8	6	62	38	45	91	13	8	8	71	1	33	0	0	1											0							0	0
8	20	62	38	52	91	24	8	7	26	6	11	0	0	72	11	4	17	1							6	50	1	76	1			0	0
9	4	62	91	48	38	42	26	3	47	2	5	0	0	5											0							0	0
9	17	62	91	17	26	17	89	11	92	8	47	0	0	23	17	2	11	1							9	76	2					0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TEXAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
DENISON, TEXAS 44

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	22.2	-	7.8	-	-	-	-	-	460	112	520	5	0	315	.0	1343	-
10	9	61	22.2	-	7.8	-	-	-	-	-	445	110	470	5	5	325	.0	1356	-
10	10	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67
10	16	61	21.1	-	8.0	-	-	-	-	-	455	106	500	5	5	325	.1	1309	-
10	23	61	20.0	-	8.0	-	-	-	-	-	460	112	570	-	5	325	.0	1300	-
10	30	61	20.5	-	8.0	-	-	-	-	-	465	112	470	0	5	335	.0	1318	33
10	31	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
11	6	61	16.1	-	8.0	-	-	-	-	-	-	112	500	0	5	305	.0	1312	-
11	7	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
11	13	61	17.2	-	8.0	-	-	-	-	-	440	110	540	5	5	305	.0	1323	-
11	14	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*3
11	20	61	16.6	-	7.8	-	-	-	-	-	435	120	450	5	25	315	.0	1311	-
11	21	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67
11	27	61	14.4	-	7.8	-	-	-	-	-	435	112	490	-	5	205	.0	1297	-
12	4	61	14.4	-	7.8	-	-	-	-	-	410	110	500	0	5	315	.1	1290	-
12	5	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
12	11	61	13.8	-	7.8	-	-	-	-	-	430	120	455	5	5	305	.0	1285	10
12	18	61	11.1	-	7.8	-	-	-	-	-	420	112	440	-	5	295	.1	1248	-
12	26	61	12.6	-	7.8	-	-	-	-	-	-	110	440	-	5	-	-	-	*3
1	2	62	8.8	-	7.8	-	-	-	-	-	425	110	440	5	5	305	.0	1227	-
1	8	62	8.3	-	8.0	-	-	-	-	-	-	116	420	-	5	252	.0	1212	-
1	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40
1	15	62	5.5	-	8.0	-	-	-	-	-	395	114	450	-	5	275	.0	-	-
1	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
1	22	62	-	-	-	-	-	-	-	-	405	-	-	5	-	275	.0	1197	-
1	23	62	4.4	-	7.8	-	-	-	-	-	-	112	500	-	5	-	-	-	3
1	29	62	5.5	-	8.0	-	-	-	-	-	385	112	450	-	5	270	.0	1170	-
1	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
2	5	62	4.4	-	7.8	-	-	-	-	-	390	114	420	-	0	275	.0	1148	-
2	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*3
2	13	62	7.7	-	8.0	-	-	-	-	-	-	116	410	-	5	-	-	-	*3
2	20	62	7.7	-	7.8	-	-	-	-	-	391	112	500	5	0	290	.0	1145	-
2	26	62	8.8	-	8.0	-	-	-	-	-	394	112	460	5	5	280	.0	1206	-
2	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
3	5	62	8.8	-	7.8	-	-	-	-	-	380	118	40	*	5	280	.0	1170	-
3	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*3
3	12	62	8.8	-	8.0	-	-	-	-	-	375	116	440	5	3	290	-	1182	-
3	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
3	19	62	-	-	-	-	-	-	-	-	360	-	-	5	-	280	.0	1172	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TEXAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
DENISON, TEXAS 44

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
3	26	62	10.0	-	8.0	-	-	-	-	-	380	120	410	5	5	235	-	1177	-
3	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110
4	[illegible]	62	-	-	-	-	-	-	-	-	375	-	-	5	-	270	.0	1174	-
4	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
4	10	62	12.2	-	8.0	-	-	-	-	-	-	120	455	-	5	-	-	-	130
4	16	62	13.3	-	7.8	-	-	-	-	-	375	122	450	5	5	270	.0	1177	-
4	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*3
4	23	62	13.8	-	7.8	-	-	-	-	-	373	122	410	5	5	280	.0	1190	-
4	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
4	30	62	14.4	-	8.0	-	-	-	-	-	370	124	430	5	3	230	-	1161	-
5	1	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
5	8	62	15.5	-	7.6	-	-	-	-	-	-	126	380	-	5	-	-	-	*3
5	14	62	15.5	-	7.6	-	-	-	-	-	365	128	455	0	5	255	.0	1239	-
5	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*3
5	22	62	16.1	-	7.6	-	-	-	-	-	375	128	470	10	5	255	-	1180	18
5	28	62	-	-	-	-	-	-	-	-	-	-	-	5	-	260	.0	1162	-
6	4	62	16.6	-	7.6	-	-	-	-	-	362	124	450	-	5	280	.0	1371	-
6	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12000
6	12	62	20.0	-	7.8	-	-	-	-	-	360	120	460	-	3	270	-	1095	1500
6	18	62	-	-	-	-	-	-	-	-	350	-	-	5	-	255	.0	1100	-
6	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1500
6	29	62	-	-	-	-	-	-	-	-	360	-	-	10	-	270	.0	1116	-
7	3	62	22.2	-	7.8	-	-	-	-	-	368	124	455	5	3	225	-	1109	20
7	10	62	22.7	-	7.4	-	-	-	-	-	-	130	420	-	3	-	-	-	-
7	17	62	22.7	-	7.4	-	-	-	-	-	400	128	420	5	5	260	-	1150	*3
7	23	62	-	-	-	-	-	-	-	-	370	-	-	5	-	260	.0	1180	-
7	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
7	31	62	23.8	-	7.5	-	-	-	-	-	380	124	460	5	5	225	-	1190	47
8	6	62	-	-	-	-	-	-	-	-	385	-	-	5	-	250	.0	1180	-
8	14	62	25.0	-	7.6	-	-	-	-	-	345	118	350	0	5	48	-	1071	*30
8	20	62	-	-	-	-	-	-	-	-	348	-	-	5	-	295	.0	1090	-
8	28	62	25.5	-	7.2	-	-	-	-	-	-	138	380	-	5	-	-	-	*3
9	4	62	-	-	-	-	-	-	-	-	360	-	-	5	-	240	.1	1100	*3
9	11	62	24.4	-	7.4	-	-	-	-	-	-	138	410	-	5	-	-	-	-
9	17	62	-	-	-	-	-	-	-	-	318	-	-	5	-	230	.0	1050	-
9	18	62	25.5	-	7.4	-	-	-	-	-	-	122	380	-	5	-	-	-	3
9	25	62	25.5	-	7.5	-	-	-	-	-	-	114	370	-	5	-	-	-	20

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Colbert, Oklahoma
Operated by U.S. Army Corps of Engineers

STATE	Texas
MAJOR BASIN	Southwest-Lower Mississippi River
MINOR BASIN	Lower Red River below Denison
STATION LOCATION	Red River at Denison, Texas

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.121	3.990	10.300	.500	3.400	1.200	1.480	2.250	1.500	4.400	4.920	2.290
2	2.770	3.690	5.960	3.300	3.500	1.000	3.580	3.280	.100	5.940	3.580	.200
3	2.860	1.770	4.740	3.100	3.320	.336	3.520	3.640	.200	5.980	4.660	1.840
4	2.660	.432	4.880	2.410	.226	.118	3.100	2.640	7.140	6.330	2.300	4.960
5	2.760	.666	4.880	2.770	.387	1.850	3.450	.108	11.800	7.620	.208	2.520
6	3.510	2.930	5.150	.348	.700	1.570	4.220	.055	12.200	6.080	5.510	2.480
7	3.340	2.990	5.320	.706	.694	1.370	.341	2.560	12.200	3.760	5.860	2.730
8	2.530	2.380	4.530	2.420	.548	1.490	.300	2.680	12.200	1.180	5.930	3.040
9	3.190	1.910	3.040	4.000	.788	1.720	2.700	2.500	15.000	4.790	5.780	.266
10	5.360	2.060	3.150	4.800	.719	.143	2.240	1.940	25.800	4.780	5.660	3.420
11	8.960	2.640	4.630	4.200	.566	.100	3.030	1.970	37.500	4.730	2.990	4.720
12	10.000	2.290	4.800	3.000	4.050	2.270	2.200	.109	43.200	4.880	1.830	5.140
13	9.870	3.770	4.800	.519	3.920	2.380	3.140	.096	43.200	4.900	5.090	5.470
14	9.960	4.130	4.700	1.150	3.550	2.950	3.320	.115	43.200	3.820	5.360	5.620
15	9.450	4.240	4.600	2.140	2.070	1.870	1.100	1.360	40.800	.255	5.220	3.660
16	9.200	4.220	3.000	4.450	1.360	1.260	3.140	1.500	32.200	3.250	5.110	2.530
17	9.060	4.190	3.000	4.310	.419	.132	2.460	1.530	30.200	5.220	5.430	4.720
18	9.790	.340	4.500	3.740	.362	.107	2.370	1.500	26.500	4.810	3.160	4.690
19	8.680	.378	4.600	3.820	2.150	1.520	2.400	.200	20.600	5.060	1.660	5.020
20	5.500	3.260	4.500	4.760	2.840	1.430	2.060	.156	20.600	5.260	5.260	5.130
21	2.870	3.360	4.500	4.250	2.960	1.750	.838	1.150	20.300	2.820	5.330	4.790
22	.203	6.450	4.600	3.000	2.980	1.790	.534	.260	20.300	2.620	5.270	1.900
23	3.560	9.590	3.000	3.300	3.060	.960	.204	1.280	20.300	5.010	5.340	.425
24	4.130	9.590	2.000	2.600	.164	.102	1.620	.386	19.700	5.300	5.480	4.660
25	3.990	9.370	.600	3.180	.110	.611	.516	.232	13.900	5.280	1.650	4.320
26	3.980	9.150	4.600	3.340	2.630	1.480	.549	.837	10.200	4.220	.165	4.670
27	3.700	8.270	4.700	3.400	1.540	1.190	.436	.241	6.640	2.970	4.920	5.610
28	1.080	8.710	4.900	3.400	2.400	1.890	2.090	.281	5.320	3.760	5.130	6.500
29	.339	9.150	5.000	3.430		1.520	.420	.105	5.050	2.740	4.920	6.300
30	3.190	10.300	3.200	3.410		1.740	2.600	.600	7.280	5.460	5.320	3.550
31	2.620		.400	3.360		.800		2.410		6.990	5.440	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /LOWER/ BELOW PECOS RIVER
STATION LOCATION RIO GRANDE AT
BROWNSVILLE, TEXAS 71

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES					CHLOROFORM EXTRACTABLES								
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLOROFORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGENATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	3	61	11	18	3508	171	52	119	1	10	28	10	3	14	1	6	2	1	4
2	14	62	3	4	2460#	272	37	235	0	5	22	5	3	13	1	4	1	1	4
4	7	62	4	25	3691	187	48	139	3	14	14	4	2	8	0	6	3	1	7
9	20	62	9	28	5030	139	44	95	1	12	16	2	2	12	0	5	2	1	7

ESTIMATED

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /LOWER/ BELOW PECOS RIVER
STATION LOCATION RIO GRANDE AT
BROWNSVILLE, TEXAS 71

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA								DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL						ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±			MO.	DAY	μμc/g	±	μμc/g	±
10	4	61	10	26	-	-	-	-	-	-	3	26	25	40	28	48								
10	11	61	10	25	-	-	-	-	-	-	15	26	22	30	37	40								
10	18	61	10	31	-	-	-	-	-	-	10	21	11	31	21	37								
11	1	61	11	13	-	-	-	-	-	-	0	26	0	26	0	37								
11	8	61	11	21	-	-	-	-	-	-	22	27	0	25	22	37								
11	15	61	11	28	-	-	-	-	-	-	22	19	52	26	74	32								
11	22	61	12	1	-	-	-	-	-	-	9	21	33	28	42	35								
11	28	61	12	11	1	2	8	8	9	8	18	26	13	39	31	47								
12	6	61	12	19	-	-	-	-	-	-	47	29	52	40	99	49								
12	13	61	12	26	-	-	-	-	-	-	4	25	35	29	39	38								
12	20	61	1	3	-	-	-	-	-	-	11	27	3	33	14	43								
12	27	61	1	9	1	2	2	4	3	4	22	20	31	26	53	33								
1	3	62	1	15	-	-	-	-	-	-	9	21	18	28	27	35								
1	24	62	2	2	1	1	5	3	6	3	19	14	35	16	54	21								
2	1	62	2	13	-	-	-	-	-	-	16	21	37	28	53	35								
2	7	62	2	16	-	-	-	-	-	-	10	9	21	12	31	16								
2	14	62	3	1	-	-	-	-	-	-	17	20	21	26	38	33								
2	21	62	3	7	2	2	2	3	4	3	4	21	14	25	18	33								
2	28	62	3	16	1	3	1	4	2	5	0	16	25	21	25	26								
3	7	62	3	20	-	-	-	-	-	-	0	20	20	25	20	32								
3	11	62	3	30	-	-	-	-	-	-	13	22	0	29	13	36								
3	21	62	4	5	-	-	-	-	-	-	22	25	33	32	55	50								
3	28	62	4	11	0	2	0	4	0	4	17	20	17	24	34	31								
4	5	62	6	13	-	-	-	-	-	-	317	58	101	50	418	77								
4	12	62	4	27	-	-	-	-	-	-	3	20	27	30	30	36								
4	19	62	5	22	-	-	-	-	-	-	8	34	5	49	13	60								
4	26	62	6	1	0	2	2	3	2	4	0	21	32	25	32	33								
5	4	62	6	21	-	-	-	-	-	-	22	26	13	27	35	37								
5	10	62	6	20	-	-	-	-	-	-	7	30	29	34	36	45								
5	24	62	6	29	-	-	-	-	-	-	0	15	18	17	18	23								
5	31	62	7	3	8	7	3	4	11	8	37	31	7	24	44	39								
6	7	62	7	10	-	-	-	-	-	-	12	22	27	28	39	36								
6	14	62	8	14	-	-	-	-	-	-	15	22	16	29	31	36								
6	21	62	7	18	-	-	-	-	-	-	0	18	15	25	15	31								
6	28	62	7	25	8	11	3	3	11	11	19	39	30	26	49	47								
7	6	62	8	7	0	1	3	3	3	3	12	52	55	68	67	86								
7	23	62	8	21	0	2	0	2	0	3	20	26	37	34	57	43								
7	31	62	8	22	-	-	-	-	-	-	0	35	8	32	8	47								
8	6	62	10	12	0	2	2	6	2	6	23	28	22	38	45	47								
8	20	62	9	6	-	-	-	-	-	-	14	26	33	34	47	43								
8	27	62	9	17	-	-	-	-	-	-	11	63	102	82	113	103								

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /LOWER/ BELOW PECOS RIVER
STATION LOCATION RIO GRANDE AT
BROWNSVILLE, TEXAS 71

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
9	5	62	10	4	-	-	-	-	-	-	5	26	16	40	21	48						
9	17	62	10	9	-	-	-	-	-	-	0	29	17	37	17	47						
9	24	62	10	24	-	-	-	-	-	-	7	22	18	27	25	35						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	TEXAS
MAJOR BASIN	WESTERN GULF
MINOR BASIN	RIO GRANDE /LOWER/ BELOW PECOS RIVER
STATION LOCATION	RIO GRANDE AT BROWNSVILLE, TEXAS 71

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	8800	230	0	970	100	330	0	930	6210	100	310	92	4	68	3	74	3	88	3	97	2	98	2	78	2	38	2	35	1	75	1
10	18	61	4500	930	20	310	140	250	40	270	2480	0	80	92	4	3	2	1	2	88	1												
11	8	61	6300	40	0	890	20	1240	20	480	3600	40	60	51	3	89	3	88	3	38	2	92	2	68	2	74	1	78	1				
11	21	61	10000	700	60	1700	0	440	20	890	6150	40	270	92	6	88	3	38	3	1	2	55	1	44	1	25	1						
12	6	61	23000	4030	90	3690	0	680	20	1370	13100	200	1550	92	6	1	5	25	4	88	4	3	4	68	3	89	2	38	2	74	2	44	2
12	20	61	5000	380	20	1600	0	430	0	650	1960	180	140	83	4	98	3	38	3	25	2	71	2	51	2	68	1	92	1	3	1		
1	3	62	3200	120	0	690	0	0	0	250	2110	0	330	88	3	83	2	38	2	87	1	92	1										
1	18	62	800	70	0	50	0	90	140	140	320	50	50	92	1																		
2	7	62	1500	50	20	140	0	110	0	250	900	0	200	84	3																		
2	21	62	3000	110	0	800	0	160	0	50	1850	20	200	88	3	38	2	83	2														
3	7	62	19400	80	80	1800	0	580	80	750	16020	0	410	84	7	38	3	51	2	45	1	44	1	25	1								
3	21	62	11200	70	20	970	0	230	50	270	9590	70	610	88	3	84	2	38	2	92	2	33	1	51	1	83	1	87	1				
4	5	62	5400	580	0	1280	0	120	40	500	2860	40	120	83	4	84	3	25	3	9	2	38	1	30	1	92	1						
4	19	62	19600	380	300	6710	170	0	130	930	10970	550	1220	92	6	40	4	38	3	44	3	35	3	25	2	30	2	44	2	45	2	88	2
5	10	62	12000	370	40	3390	0	250	290	1040	6580	210	620	84	4	71	3	88	3	40	3	38	3	44	2	3	2	61	1	25	1	45	1
5	24	62	18500	340	210	7470	0	380	0	4010	6080	340	1060	40	5	83	5	68	4	71	4	38	4	92	3	45	3	88	3	87	3	35	2
6	7	62	4700	350	0	1950	0	390	0	540	1490	40	80	38	3	84	3	35	2	88	2	68	2	40	1	71	1	3	1	57	1	51	1
6	21	62	15400	340	80	5060	0	170	0	3630	6120	380	930	38	5	88	5	68	5	83	4	40	2	71	2	1	1						
7	18	62	8400	220	90	1150	0	200	0	110	6660	70	3710	76	5	88	4	25	1	38	1	44	1	83	1	51	1	92	1	1	1		
8	6	62	7300	480	0	520	40	60	0	250	5920	80	290	84	6	3	2	68	1	38	1												
8	20	62	9000	350	170	1930	210	190	0	580	5590	40	210	92	6	30	2	25	2	3	2	38	2	68	1	71	1	44	1	40	1	50	1
9	5	62	26600	760	5610	3630	40	0	0	2030	14520	510	1060	76	6	16	6	92	5	68	4	25	4	88	3	5	2	30	2	26	2	44	2
9	17	62	5000	1510	20	920	0	140	0	110	2300	110	3650	3	4	92	4	35	1	38	1	25	1	26	1	88	1						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TEXAS

MAJOR BASIN WESTERN GULF

MINOR BASIN RIO GRANDE /LOWER/ BELOW PECOS RIVER

STATION LOCATION RIO GRANDE AT

BROWNSVILLE, TEXAS 071

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	4	61										0	0	14	2	1	11	1							1							0	0
10	18	61	89	77	70	4	26	3	71	3	13	0	20	1020	3	7	11	6	22	5	17	5	2	4	2							0	0
11	8	61	75	20	26	11	89	11	56	6	52	0	0	0											0							0	0
11	21	61	89	82	70	7	71	6	26	2	3	0	0	11	17	1									0							0	0
12	6	61	89	63	75	4	71	4	26	4	25	320	0	226	21	5	17	4	11	3	22	1	18	1	3							1	0
12	20	61	38	41	70	16	71	8	89	6	29	160	0	26	21	3									0							0	0
1	3	62	70	25	38	15	47	10	5	5	45	0	20	135	21	5	17	1							1							0	0
1	18	62	89	61	47	10	38	6	92	6	17	0	20	43	21	3	17	2							0							0	0
2	7	62	47	56	92	5	36	4	74	3	32	70	0	0											0							0	0
2	21	62	38	13	70	13	80	8	82	8	58	20	0	105	21	5	17	1							4	50	1					0	0
3	7	62	47	93	80	3	92	1	97	1	2	0	0	22	11	2	17	1							0							0	0
3	21	62	47	26	89	20	38	6	71	5	43	0	0	75	11	4	17	2	21	2					0							0	0
4	5	62	38	21	27	20	47	12	89	10	37	0	0	7											6	50	2					0	0
4	19	62	91	30	38	11	90	8	47	8	43	0	0	481	21	7	17	4	46	1					3	50	1					1	0
5	10	62	47	69	80	11	65	4	6	2	14	40	0	84	21	3	11	3	17	2					7	50	1					0	1
5	24	62	38	31	47	22	91	15	26	2	30	0	10	36	21	2	11	2							0							0	0
6	7	62	47	54	26	8	38	6	80	4	28	0	0	0											0							0	0
6	21	62	47	60	70	12	38	7	27	5	16	0	0	0											0							0	0
7	18	62	8	33	67	29	26	14	71	9	15	0	10	171	2	6									4	50	1					0	0
8	6	62	47	95	27	2	38	1	75	1	1	0	0	216	11	6	17	2							0							0	0
8	20	62	89	90	92	3	38	2	70	1	4	0	0	111	11	3	17	3	22	3	2	2			6	50	2					0	0
9	5	62	8	58	89	25	92	4	26	3	10	0	0	1120	46	8	2	5	22	5	18	3	11	2	3	50	1					0	0
9	17	62	89	41	8	24	92	11	91	7	17	0	0	97	2	5	18	2							0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /LOWER/ BELOW PECOS RIVER
STATION LOCATION RIO GRANDE AT
BROWNSVILLE, TEXAS 71

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	4	61	20.0	8.4	7.7	1.6	-	-	-	-	200	100	276	-	55	-	-	-	910
10	11	61	29.0	8.0	7.4	1.3	-	-	-	-	205	150	336	-	45	-	-	-	110
10	18	61	24.0	8.0	8.4	1.1	-	-	-	-	320	180	316	-	55	360	.5	-	40
10	25	61	25.0	8.7	8.4	1.4	-	-	-	-	235	150	396	-	50	300	-	-	-
11	1	61	27.0	8.5	8.4	1.2	-	-	-	-	200	170	264	-	165	200	-	-	1500
11	8	61	20.3	9.0	7.1	1.5	-	-	-	-	135	120	252	-	180	140	-	-	2500
11	15	61	22.0	9.2	8.4	1.4	-	-	-	-	200	150	348	5	50	-	-	985	600
11	22	61	26.3	9.8	8.2	1.4	-	-	-	-	165	140	336	-	37	-	-	-	500
11	29	61	21.3	9.3	8.2	1.2	-	-	-	-	330	140	-	-	54	310	-	1498	550
12	6	61	23.2	-	8.2	-	-	-	-	-	340	190	-	5	25	290	-	1368	580
12	13	61	15.3	-	8.2	-	-	-	-	-	245	140	-	5	65	250	-	860	410
12	20	61	18.2	-	8.4	-	-	-	-	-	225	140	-	5	20	-	-	871	1000
12	27	61	20.5	-	8.2	-	-	-	-	-	240	230	-	-	20	-	-	-	200
1	3	62	22.0	9.2	7.9	1.9	-	-	-	-	270	130	-	-	15	-	-	767	700
1	11	62	16.5	10.0	8.0	2.0	-	-	-	-	160	160	-	-	50	-	-	-	*10
1	17	62	19.5	9.4	8.2	1.6	-	-	-	-	165	85	-	-	50	-	-	-	-
1	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	800
1	24	62	21.5	9.2	7.8	1.3	-	-	-	-	130	100	-	5	90	-	-	551	1500
2	1	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80
2	2	62	26.5	8.2	8.2	1.0	-	-	-	-	155	50	-	-	40	-	-	662	-
2	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	730
2	8	62	25.5	8.4	8.2	1.2	-	-	-	-	130	40	-	-	67	-	-	552	-
2	14	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	260
2	15	62	23.5	8.0	8.2	.9	-	-	-	-	140	50	-	-	56	-	-	-	-
2	21	62	25.5	8.0	8.2	1.0	-	-	-	-	155	40	-	-	40	-	-	-	12000
2	22	62	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-
2	28	62	19.5	8.4	8.4	.8	-	-	-	-	180	30	-	5	30	-	-	726	230
3	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
3	8	62	21.5	9.0	8.2	1.5	-	-	-	-	195	60	-	-	65	-	-	-	-
3	14	62	19.5	8.9	8.2	1.0	-	-	-	-	250	55	-	0	45	-	-	522	120
3	21	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
3	28	62	24.5	7.8	8.2	1.8	-	-	-	-	270	210	-	10	17	-	-	847	40
4	4	62	22.5	8.3	8.1	1.1	-	-	-	-	380	140	-	-	60	-	-	-	-
4	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	990
4	12	62	26.5	7.8	8.3	.8	-	-	-	-	105	100	-	5	25	-	-	917	*100
4	19	62	24.5	8.2	8.4	1.2	-	-	-	-	360	110	-	-	22	-	-	-	900
4	26	62	29.5	8.9	8.3	1.0	-	-	-	-	300	120	-	-	40	-	-	627	3000
5	4	62	26.5	7.4	8.3	1.5	-	-	-	-	130	130	-	10	105	-	-	420	200
5	10	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	801	*100

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /LOWER/ BELOW PECOS RIVER
STATION LOCATION RIO GRANDE AT
BROWNSVILLE, TEXAS 71

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
5	17	62	27.5	8.8	8.3	.8	-	-	-	-	250	145	-	-	70	-	-	-	-
5	24	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	731	800
5	31	62	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	648	-
6	7	62	29.5	8.1	8.3	.9	-	-	-	-	130	120	-	0	75	-	-	741	-
6	14	62	30.5	8.0	8.3	.8	-	-	-	-	140	-	-	5	45	-	-	627	600
6	21	62	30.5	7.2	8.3	1.1	-	-	-	-	130	110	-	0	42	-	-	675	200
6	28	62	31.0	7.5	8.3	.8	-	-	-	-	130	110	56	5	55	-	-	721	1400
7	6	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	2250	-
7	18	62	-	7.8	8.3	1.0	-	-	-	-	750	140	636	-	18	-	-	-	200
7	23	62	30.0	7.7	8.3	1.1	-	-	-	-	300	150	392	0	23	-	-	1100	680
7	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	280
8	6	62	-	7.0	8.1	.9	-	-	-	-	300	130	412	0	*25	315	.0	1300	420
8	21	62	-	7.0	8.2	.8	-	-	-	-	260	130	370	5	60	-	-	985	140
8	14	62	-	1.4	8.3	-	-	-	-	-	320	110	-	-	35	310	-	-	-
8	27	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	1582	140
9	4	62	-	7.0	8.2	.9	-	-	-	-	390	134	460	-	65	-	-	-	7000
9	5	62	-	-	-	-	-	-	-	-	-	-	-	0	-	280	.0	1305	-
9	17	62	-	7.0	8.2	1.0	-	-	-	-	380	148	430	-	50	-	-	-	700
9	24	62	-	7.5	8.2	.8	-	-	-	-	160	112	230	-	30	165	.0	700	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Brownsville, Texas
Supplied by International Boundary and Water Commission

STATE	Texas
MAJOR BASIN	Western Gulf
MINOR BASIN	Rio Grande/Lower/below Pecos River
STATION LOCATION	Rio Grande at Brownsville, Texas

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	2.297	1.718	.198	.116	.145	.150	1.007	.388	.365	1.128	.133	.387
2	2.268	.623	.159	.167	.245	.128	.955	.464	.114	.768	.157	.302
3	2.017	.278	.170	.337	.299	.272	1.027	.814	.545	.374	.211	.247
4	1.807	.202	.227	.333	.588	.292	.871	1.108	1.578	.305	.160	.262
5	1.024	.308	.289	.183	1.045	.272	.731	1.028	1.543	.451	.190	.228
6	.452	.760	.683	.150	.932	.201	1.037	.531	.505	.546	.192	.174
7	.296	1.167	1.937	.210	.418	.135	.884	.280	.158	.487	.157	.151
8	.239	1.547	1.947	.225	.146	.078	.653	.342	.055	.324	.121	.148
9	.369	1.427	.875	.238	.111	.077	.629	.759	.853	.254	.121	.138
10	.477	.939	.353	.143	.110	.144	.500	.485	.739	.325	.121	.116
11	.426	.512	.223	.346	.198	.160	.180	.242	.666	.279	.185	.114
12	.298	.317	.483	.620	.231	.142	.123	.215	.722	.410	.574	.111
13	.264	.378	.639	.462	.265	.333	.246	.299	.540	.426	.639	.114
14	.407	.510	1.122	.198	.319	.330	.236	.257	.349	.327	.565	.146
15	.642	.509	1.168	.142	.232	.269	.136	.260	.230	.339	.261	.092
16	.548	.265	.831	.096	.180	.188	.357	.172	.209	.736	.182	.095
17	.298	.237	.496	.061	.143	.519	.454	.118	.154	.689	.155	.194
18	.205	.205	.326	.122	.146	.603	.186	.112	.294	.319	.102	.113
19	.184	.201	.158	.171	.231	.474	.079	.101	.623	.204	.218	.109
20	.159	.483	.338	.145	.313	.389	.167	.100	.648	.176	.236	.118
21	.143	.552	.243	.190	.200	.353	.309	.081	.330	.184	.257	.129
22	.150	.303	.167	.526	.153	.305	.184	.101	.224	.233	.240	.120
23	.510	.222	.162	.858	.131	.209	.096	.185	.228	.456	.253	.112
24	.915	.250	.117	.710	.144	.172	.164	.138	.426	.284	.189	.105
25	.659	.383	.094	.369	.249	.157	.548	.095	.770	.365	.165	.131
26	.266	.602	.197	.178	.386	.178	.324	.244	1.356	.368	.148	.127
27	.148	.500	.308	.163	.353	.135	.178	.251	1.106	.220	.166	.146
28	.200	.419	.237	.194	.200	.103	.277	.214	1.179	.192	.175	.161
29	.670	.309	.126	.224		.117	.439	.690	1.629	.191	.158	.138
30	1.954	.256	.104	.837		.115	.407	1.245	1.469	.171	.194	.117
31	2.478		.107	.475		.312		.903		.130	.375	

Computed as being sum of (1) Flow at Lower Brownsville Station, (2) City of Matamoros Diversion and (3) average daily Diversion at El Jardin Pump.

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE TEXAS

MAJOR BASIN WESTERN GULF

MINOR BASIN RIO GRANDE /LOWER/ BELOW PECOS RIVER

STATION LOCATION RIO GRANDE AT
LAREDO, TEXAS 45

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	25	61	10	30	5365	58	14	44	0	4	5	2	0	3	0	2	1	1	1
11	15	61	11	24	3715	99	20	79	0	3	12	4	1	7	0	2	1	0	2
12	12	61	1	2	2634	103	15	88	0	3	8	2	1	5	0	2	1	1	0
1	20	62	2	3	1052	205	23	182	-	-	-	-	-	-	-	-	-	-	-
2	15	62	2	27	4551	85	12	73	1	3	4	1	1	2	0	2	1	0	1
3	26	62	4	3	7555	63	17	46	1	5	5	1	0	4	0	2	1	0	3
4	20	62	5	1	3039	177	68	109	1	21	19	2	2	14	1	8	5	1	13
5	18	62	5	25	5185	80	19	61	1	6	6	1	1	4	0	2	1	1	2
6	26	62	7	3	4824	112	53	59	1	15	15	3	1	9	2	6	4	1	11
7	19	62	7	24	4247	84	29	55	0	7	12	3	1	7	1	3	1	0	6
8	14	62	8	21	4332	116	44	72	1	8	19	7	1	11	0	5	2	1	8
9	6	62	9	10	1771	179	36	143	0	9	14	3	1	10	0	4	2	1	6

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE TEXAS

MAJOR BASIN WESTERN GULF

MINOR BASIN RIO GRANDE /LOWER/ BELOW PECOS RIVER

STATION LOCATION RIO GRANDE AT
LAREDO, TEXAS 45

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA								DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL						ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±			MO.	DAY	µµc/g	±	µµc/g	±
10	3	61	10	19	-	-	-	-	-	-	7	15	15	14	22	21								
10	10	61	10	24	-	-	-	-	-	-	18	18	12	15	30	24								
10	17	61	11	1	3	3	3	3	6	4	13	11	17	11	30	16								
10	24	61	11	3	-	-	-	-	-	-	8	11	18	14	26	18								
10	31	61	11	9	-	-	-	-	-	-	45	21	31	15	76	26								
11	7	61	11	17	-	-	-	-	-	-	75	21	42	16	117	28								
11	14	61	11	28	-	-	-	-	-	-	43	18	22	15	65	23								
11	21	61	12	4	2	2	3	3	5	4	15	10	17	12	32	16								
11	28	61	12	6	-	-	-	-	-	-	22	11	40	15	62	19								
12	5	61	12	14	-	-	-	-	-	-	13	9	46	12	59	15								
12	12	61	12	26	-	-	-	-	-	-	3	12	11	15	14	19								
12	19	61	1	4	0	1	7	4	7	4	9	8	18	12	27	14								
12	26	61	1	3	-	-	-	-	-	-	12	12	18	16	30	20								
1	2	62	1	15	-	-	-	-	-	-	17	17	21	20	38	26								
1	9	62	1	22	-	-	-	-	-	-	2	22	27	26	29	34								
1	16	62	1	29	1	2	2	3	3	4	0	16	4	18	4	24								
1	23	62	2	2	-	-	-	-	-	-	0	11	13	16	13	19								
1	30	62	2	12	-	-	-	-	-	-	13	22	23	27	36	35								
2	6	62	2	16	-	-	-	-	-	-	0	23	4	26	4	35								
2	13	62	2	27	-	-	-	-	-	-	14	30	25	34	39	45								
2	20	62	3	8	0	3	0	3	0	4	10	17	29	20	39	26								
2	27	62	3	12	-	-	-	-	-	-	4	17	26	20	30	26								
3	6	62	3	19	-	-	-	-	-	-	1	17	0	19	1	25								
3	13	62	3	26	-	-	-	-	-	-	5	16	20	20	25	26								
3	20	62	4	3	1	2	3	4	4	4	30	17	22	19	52	25								
3	27	62	4	12	-	-	-	-	-	-	19	15	24	18	43	23								
4	3	62	4	20	-	-	-	-	-	-	9	20	42	28	51	34								
4	10	62	4	23	-	-	-	-	-	-	41	22	40	27	81	35								
4	17	62	4	30	1	2	3	4	4	4	18	17	48	20	66	26								
4	24	62	5	31	-	-	-	-	-	-	53	34	52	31	105	46								
5	1	62	6	4	-	-	-	-	-	-	347	57	44	16	391	59								
5	8	62	6	21	-	-	-	-	-	-	18	13	49	19	67	23								
5	15	62	6	26	-	-	-	-	-	-	4	29	22	32	26	43								
5	22	62	6	27	0	2	0	2	0	3	7	23	12	26	19	35								
5	29	62	10	11	-	-	-	-	-	-	2	28	12	27	14	39								
6	5	62	7	6	-	-	-	-	-	-	26	11	45	12	71	16								
6	12	62	7	9	-	-	-	-	-	-	75	35	40	15	115	38								
6	19	62	7	18	4	7	2	3	6	8	31	56	27	14	58	58								
6	26	62	7	23	-	-	-	-	-	-	17	11	1	15	18	19								
7	3	62	8	1	-	-	-	-	-	-	107	25	22	17	129	30								
7	10	62	8	17	-	-	-	-	-	-	9	12	35	16	44	20								

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /LOWER/ BELOW PECOS RIVER
STATION LOCATION RIO GRANDE AT
LAREDO, TEXAS 45

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	17	62	8	7	0	2	1	3	1	4	14	21	43	25	57	33						
7	24	62	8	15	-	-	-	-	-	-	723	238	31	16	754	239						
7	31	62	8	23	-	-	-	-	-	-	1394	234	35	15	1429	234						
8	7	62	8	23	-	-	-	-	-	-	56	66	13	25	69	71						
8	14	62	8	30	-	-	-	-	-	-	55	34	19	15	74	39						
8	21	62	9	6	1	2	6	4	7	4	23	13	41	16	64	21						
8	28	62	9	17	-	-	-	-	-	-	6	14	27	19	33	24						
9	4	62	9	28	-	-	-	-	-	-	10	10	21	13	31	16						
9	11	62	10	9	-	-	-	-	-	-	159	51	26	15	185	53						
9	18	62	10	10	103	68	4	3	107	68	593	205	38	15	631	206						
9	25	62	10	22	-	-	-	-	-	-	53	21	20	5	73	22						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	TEXAS
MAJOR BASIN	WESTERN GULF
MINOR BASIN	RIO GRANDE /LOWER/ BELOW PECOS RIVER
STATION LOCATION	RIO GRANDE AT LAREDO, TEXAS

45

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	3	61	1100	0	0	290	0	170	0	210	390	60	60																				
10	17	61	700	0	0	170	0	290	0	150	150	20	20	59	1																		
11	7	61	200	0	0	0	0	20	0	90	130	50	130																				
11	21	61	3800	0	0	350	0	270	0	2190	970	600	330	92	3	51	1	69	1														
12	5	61	4800	0	0	510	0	580	0	490	3220	200	2610	92	5	68	2	51	2	38	2	25	1										
12	12	61	3600	20	0	250	0	110	0	340	2880	230	1800	92	4	84	3	88	1	68	1												
1	2	62	6800	0	0	130	0	40	0	210	6440	60	500	84	4	88	4	92	4	82	3												
1	16	62	4800	0	20	20	0	150	0	100	4510	20	660	84	4	82	4	88	4	92	3	78	2										
2	6	62	14000	500	650	650	0	290	0	1060	10870	110	1100	84	5	82	5	25	3	15	2	4	2	51	1								
2	20	62	22300	80	0	750	0	870	40	330	20200	150	520	84	7	51	3	38	1	68	1												
3	6	62	39400	0	0	460	0	330	540	210	37880	40	1260	84	8	62	2	25	1	68	1												
3	20	62	25200	80	0	370	0	450	0	210	24140	0	480	84	7	88	6	52	1														
4	3	62	42300	40	0	1120	0	2110	460	3640	34940	370	1080	84	8	88	5	68	5	92	4	89	4	87	4	51	4	83	3	79	3	38	3
4	17	62	5500	0	0	850	0	750	0	190	3730	60	620	88	3	89	3	51	3	84	2	87	2	25	1	79	1	86	1	28	1		
5	8	62	11400	20	20	610	0	0	20	4620	6060	550	680	68	5	71	4	88	4	92	3	82	2	73	2	79	2	38	2	78	2	89	2
5	22	62	39500	6580	0	14740	0	3520	210	870	13620	370	910	3	6	92	6	35	5	51	5	31	4	25	4	32	4	33	4	38	3	68	2
6	5	62	2800	0	0	290	0	40	0	390	2070	40	330	88	3	68	1	87	1	92	1	83	1										
6	19	62	2100	0	0	40	0	0	0	340	1690	40	510	88	3	84	1	68	1														
7	3	62	300	0	0	0	0	20	0	0	290	20	20																				
7	17	62	4100	0	0	830	0	680	40	290	2280	120	370	88	4	33	2	87	2	52	2	51	2	68	1	83	1						
8	7	62	1000	0	0	0	0	150	0	0	870	20	210	88	2	92	1																
8	21	62	4800	0	0	430	*	100	0	290	1160	0	80	50	5	88	3	38	1	68	1	87	1										
9	4	62	14300	80	20	11570	0	430	0	330	1820	250	1160	33	6	32	4	35	3	88	3	25	3	68	2	89	1	51	1	87	1	52	1
*8	21	62					2860																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /LOWER/ BELOW PECOS RIVER
STATION LOCATION RIO GRANDE AT
LAREDO: TEXAS 045

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA								
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)						NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	3	61										20	0	0											0							0	0
10	17	61	68	15	71	15	65	10	55	9	51	0	0	0											0							0	0
11	7	61	71	14	69	11	68	10	72	7	58	70	0	0											0							0	0
11	21	61	80	47	71	2	26	8	68	4	29	0	0	0											0							0	0
12	5	61	91	84	26	5	27	3	47	3	4	0	0	0											0							0	0
12	12	61	47	65	89	19	26	5	91	3	8	140	0	0											0							0	0
1	2	62	47	73	71	11	36	5	89	4	7	0	0	1											0							0	0
1	16	62	47	91	36	3	71	2	89	2	2	0	0	0											0							1	0
2	6	62	47	40	36	33	89	4	75	3	20	500	0	0											0							0	0
2	20	62	47	97	89	1	26	1	70	1		40	0	0											0							0	0
3	6	62	47	97	89	1	26	1	70	1		0	0	0											0							0	0
3	20	62	47	91	71	2	68	1	72	1	5	0	0	0											0							0	0
4	3	62	47	92	26	2	75	1	89	1	4	80	0	10	17	1	21	1							0							0	0
4	17	62	47	78	75	5	71	4	26	2	11	60	0	0											0							0	0
5	8	62	47	57	80	4	36	3	71	3	33	150	10	0											1							0	0
5	22	62	89	26	47	13	91	13	16	12	36	0	20	1											0							0	0
6	5	62	68	21	89	17	38	12	5	10	40	20	0	0											0							0	0
6	19	62	68	15	47	8	89	6	38	5	66	0	0	0											0							0	0
7	3	62	47	12	92	9	41	6	68	5	68	0	0	-											-							-	-
7	17	62	26	24	68	15	47	13	71	9	39	0	0	0											0							0	0
8	7	62	69	31	92	23	47	8	33	4	34	0	0	-											-							-	-
8	21	62	26	16	65	6	68	5	71	5	68	0	0	0											0							0	0
9	4	62	71	22	26	17	75	12	72	6	43	0	0	2060	15	8	17	7	22	6	7	3			4	50	1					0	1

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /LOWER/ BELOW PECOS RIVER
STATION LOCATION RIO GRANDE AT
LAREDO, TEXAS 45

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	24.0	-	8.3	-	-	-	-	-	84	134	246	-	630	198	-	-	2000
10	10	61	25.2	-	8.4	-	-	-	-	-	74	146	236	-	1050	165	-	-	1800
10	17	61	25.0	-	8.4	-	-	-	-	-	66	140	234	-	750	153	-	-	2800
10	24	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
10	30	61	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-
10	31	61	24.0	-	8.4	-	-	-	-	-	68	145	258	-	1320	213	-	-	6000
11	7	61	16.0	-	8.3	-	-	-	-	-	68	155	250	5	1140	153	.0	509	33000
11	14	61	-	-	-	-	-	-	-	-	-	-	-	5	-	-	.1	457	13000
11	21	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
11	25	61	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-
11	28	61	18.0	-	8.4	-	-	-	-	-	100	141	264	-	164	188	.0	547	100
12	5	61	20.0	-	8.3	-	-	-	-	-	100	142	262	-	107	194	.1	599	17
12	12	61	17.0	-	8.3	-	-	-	-	-	105	147	272	-	169	205	.0	598	86
12	19	61	14.0	-	8.3	-	-	-	-	-	110	152	282	-	183	206	.1	606	*33
12	26	61	14.0	-	8.3	-	7	-	-	-	110	151	278	-	210	170	.0	596	110
1	2	62	11.5	-	8.3	-	-	-	-	-	110	148	284	-	210	169	.0	605	150
1	9	62	12.0	-	8.2	-	-	-	-	-	115	150	290	-	234	182	.0	-	110
1	16	62	9.0	-	8.3	-	-	-	-	-	115	155	290	-	130	185	.0	678	*10
1	20	62	-	-	8.4	-	1	-	-	-	120	144	288	-	240	190	-	-	40
1	23	62	11.0	-	8.3	-	-	-	-	-	115	158	300	-	130	193	.0	639	-
1	30	62	12.0	-	8.3	-	-	-	-	-	115	154	296	-	184	180	.1	656	*10
2	13	62	19.5	-	8.4	-	-	-	-	-	125	135	282	5	252	192	.0	-	67
2	20	62	20.0	-	8.4	-	11	-	-	-	125	118	270	-	306	197	-	-	-
2	26	62	22.0	-	8.3	-	-	-	-	-	135	107	262	-	282	197	.1	658	-
2	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	190
3	6	62	16.2	-	8.3	-	-	-	-	-	140	110	266	-	308	200	.0	671	280
3	13	62	19.0	-	8.3	-	-	-	-	-	140	96	256	-	252	194	-	-	270
3	20	62	19.0	-	8.3	-	-	-	-	-	140	121	280	-	258	188	.0	670	140
3	27	62	19.5	-	8.4	-	-	-	-	-	145	115	286	-	194	208	.0	732	180
4	3	62	19.0	-	8.3	-	-	-	-	-	150	105	276	-	159	220	.0	719	150
4	10	62	23.5	-	8.3	-	-	-	-	-	145	127	284	-	109	186	-	692	150
4	17	62	24.0	-	8.4	-	16	-	-	-	100	130	254	-	92	153	-	550	33
4	24	62	23.0	-	7.9	-	-	-	-	-	132	100	236	-	545	158	-	657	3300
5	1	62	25.0	-	7.8	-	31	-	-	-	46	82	131	-	2040	59	-	371	1500
5	8	62	25.5	-	8.3	-	-	-	-	-	115	128	248	-	148	131	.0	545	100
5	15	62	25.5	-	8.4	-	-	-	-	-	130	97	234	-	204	185	.0	570	10
5	22	62	26.2	-	8.4	-	-	-	-	-	130	106	256	-	100	170	.0	642	1000
5	25	62	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-
5	29	62	27.2	-	8.2	-	-	-	-	-	145	128	278	-	114	171	.0	670	2500

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	TEXAS
MAJOR BASIN	WESTERN GULF
MINOR BASIN	RIO GRANDE /LOWER/ BELOW PECOS RIVER
STATION LOCATION	RIO GRANDE AT LAREDO, TEXAS 45

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	5	62	28.0	-	8.1	-	-	-	-	-	60	140	220	-	353	115	.0	473	500
6	12	62	28.0	-	8.2	-	-	-	-	-	70	109	174	-	764	100	.4	417	2500
6	19	62	29.0	-	8.3	-	-	-	-	-	86	140	244	-	930	125	.0	-	600
6	26	62	28.5	-	8.4	-	-	-	-	-	66	139	230	-	665	155	.0	542	530
7	3	62	28.0	-	8.4	-	-	-	-	-	56	114	182	-	1540	97	.0	415	1100
7	10	62	28.2	-	8.4	-	-	-	-	-	84	129	248	-	252	155	.0	556	530
7	17	62	29.1	-	8.3	-	-	-	-	-	120	121	260	-	136	174	.0	622	260
7	24	62	29.0	-	8.4	-	-	-	-	-	55	126	208	-	18000	145	.0	540	-
7	31	62	28.0	-	8.4	-	-	-	-	-	48	113	218	-	14300	150	.1	574	6000
8	7	62	29.1	-	8.1	-	-	-	-	-	78	135	270	-	1310	215	.0	640	800
8	14	62	29.9	-	8.3	-	15	-	-	-	68	131	256	-	765	188	.0	560	1600
8	21	62	28.6	-	8.3	-	-	-	-	-	82	116	210	-	302	151	.0	527	100
8	28	62	29.0	-	8.1	-	-	-	-	-	92	108	216	-	148	160	.0	543	230
9	4	62	29.0	-	8.3	-	-	-	-	-	110	88	206	-	176	159	.0	610	200
9	11	62	29.2	-	8.2	-	-	-	-	-	40	120	184	-	30800	123	-	-	-
9	18	62	29.2	-	8.3	-	72	-	-	-	30	104	228	-	9000	168	.0	534	17000
9	25	62	27.5	-	8.3	-	-	-	-	-	46	128	232	-	1460	157	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Laredo, Texas
Supplied by International Boundary and Water Commission

STATE	Texas
MAJOR BASIN	Western Gulf
MINOR BASIN	Rio Grande/Lower/below Pecos River
STATION LOCATION	Rio Grande at Laredo, Texas

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	2.450	2.830	2.010	1.890	1.770	1.350	1.140	1.950	1.170	1.960	1.900	.664
2	2.150	2.670	2.010	1.890	1.820	1.350	1.140	1.470	.992	1.780	1.840	.664
3	2.010	2.530	2.010	1.890	1.820	1.350	1.140	1.430	1.080	1.380	2.170	.664
4	2.150	2.400	1.970	1.890	1.770	1.290	1.140	1.350	1.220	1.270	2.030	.565
5	2.380	2.460	1.970	1.850	1.660	1.230	1.140	1.220	1.130	1.160	1.840	.565
6	2.150	2.460	1.970	1.850	1.660	1.230	1.140	1.170	1.420	1.160	1.660	.565
7	2.010	2.400	1.970	1.820	1.610	1.180	1.140	1.080	1.040	1.210	1.500	3.110
8	1.930	2.270	1.970	1.820	1.610	1.230	2.630	1.040	.844	.964	1.440	5.090
9	1.850	2.270	1.970	1.850	1.610	1.230	2.050	.992	.992	.844	1.380	4.700
10	2.010	2.270	1.970	1.890	1.660	1.180	1.530	.862	1.530	.964	1.270	5.510
11	2.150	2.270	1.970	1.890	1.660	1.180	1.270	.816	2.270	1.960	1.160	7.240
12	3.530	2.270	1.970	1.890	1.660	1.180	1.140	.773	2.230	1.600	1.110	10.900
13	3.090	2.270	2.010	1.890	1.660	1.180	1.030	.731	1.910	1.320	1.110	6.750
14	2.450	2.530	1.970	1.890	1.610	1.230	1.030	.689	1.310	1.060	1.270	4.800
15	2.450	2.210	1.970	1.890	1.490	1.230	1.030	.689	1.700	.922	1.320	3.640
16	2.150	2.270	1.970	1.930	1.490	1.230	.946	.689	1.540	1.110	2.720	2.840
17	2.010	2.210	1.970	1.890	1.490	1.230	.946	.643	1.420	1.320	1.160	2.460
18	2.010	2.160	1.970	1.890	1.440	1.330	.876	.643	2.400	1.320	1.010	2.360
19	1.930	2.160	2.010	1.850	1.440	1.490	.844	.689	3.050	1.160	.964	2.080
20	2.010	2.160	2.010	1.890	1.440	1.490	.812	.731	2.230	1.160	.922	1.920
21	2.920	2.210	1.970	1.890	1.440	1.430	.812	.689	1.700	1.320	1.320	1.810
22	2.970	2.210	1.970	1.890	1.440	1.380	1.050	.731	1.370	3.130	1.010	1.810
23	2.670	2.210	1.970	1.930	1.390	1.270	7.420	1.040	1.250	5.930	.749	1.740
24	2.600	2.210	1.930	1.930	1.390	1.200	4.130	.904	1.250	3.530	.706	1.740
25	2.520	2.110	1.890	1.890	1.390	1.200	1.840	1.260	1.170	2.570	.749	1.630
26	2.970	2.060	1.890	1.890	1.350	1.140	1.140	1.740	1.100	2.100	.837	1.630
27	2.970	2.060	1.890	1.850	1.390	1.140	1.080	1.790	1.170	2.450	.883	2.710
28	3.030	2.060	1.890	1.820	1.350	1.080	2.400	2.400	2.070	2.030	.883	4.060
29	3.140	2.110	1.930	1.820		1.080	4.800	1.350	1.620	1.780	.791	2.370
30	3.310	2.060	1.890	1.820		1.140	2.830	.950	3.170	1.900	.749	2.220
31	2.970		1.890	1.820		1.140		.950		2.450	.706	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /UPPER/ ABOVE PECOS RIVER
STATION LOCATION RIO GRANDE AT
EL PASO, TEXAS 46

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	16	61	10	31	-	-	-	-	-	-	0	56	0	64	0	85						
1	8	62	1	17	7	4	11	9	18	10	15	22	32	30	47	37						
1	15	62	1	26	-	-	-	-	-	-	29	21	60	31	89	37						
1	22	62	2	1	-	-	-	-	-	-	73	44	24	52	97	68						
1	29	62	2	13	1	3	6	6	7	7	9	21	54	27	63	34						
2	5	62	2	19	-	-	-	-	-	-	0	26	9	39	9	47						
2	26	62	3	14	0	3	3	10	3	10	9	20	31	31	40	37						
3	5	62	3	20	-	-	-	-	-	-	0	38	14	50	14	63						
3	12	62	3	30	-	-	-	-	-	-	63	38	5	27	68	47						
3	19	62	3	30	-	-	-	-	-	-	52	26	11	20	63	33						
3	26	62	4	11	3	4	4	4	7	6	62	21	26	19	88	28						
4	2	62	4	19	-	-	-	-	-	-	63	19	21	17	84	25						
4	9	62	4	26	-	-	-	-	-	-	37	26	25	27	62	37						
4	16	62	4	30	-	-	-	-	-	-	16	23	22	22	38	32						
4	23	62	5	29	1	3	0	3	1	4	5	25	0	24	5	34						
4	30	62	4	30	-	-	-	-	-	-	67	29	37	36	104	46						
5	7	62	7	11	-	-	-	-	-	-	14	25	40	29	54	38						
5	14	62	6	22	-	-	-	-	-	-	14	34	36	35	50	49						
5	21	62	7	27	-	-	-	-	-	-	0	10	19	15	19	18						
5	28	62	6	28	2	3	2	3	4	4	110	31	28	28	138	42						
6	4	62	7	6	-	-	-	-	-	-	37	23	32	23	69	33						
6	11	62	7	13	-	-	-	-	-	-	7	14	10	16	17	21						
6	18	62	7	16	-	-	-	-	-	-	15	28	11	29	26	40						
6	25	62	7	25	3	3	3	3	6	4	7	24	27	27	34	36						
7	2	62	8	6	-	-	-	-	-	-	12	19	15	22	27	29						
7	9	62	8	15	-	-	-	-	-	-	25	28	70	29	95	40						
7	16	62	8	3	-	-	-	-	-	-	21	23	34	25	55	34						
7	23	62	8	10	5	5	3	3	8	6	46	31	28	27	74	41						
7	30	62	8	17	-	-	-	-	-	-	304	111	20	15	324	112						
8	6	62	8	29	-	-	-	-	-	-	110	70	17	26	127	75						
8	13	62	8	31	-	-	-	-	-	-	20	36	22	16	42	39						
8	20	62	9	9	-	-	-	-	-	-	15	18	15	19	30	26						
8	27	62	9	13	2	2	3	4	5	4	38	27	36	34	74	43						
9	4	62	10	1	-	-	-	-	-	-	37	24	24	25	61	36						
9	10	62	10	9	-	-	-	-	-	-	85	36	40	31	125	48						
9	17	62	10	13	-	-	-	-	-	-	5	29	35	37	40	47						
9	24	62	10	22	0	2	5	6	5	6	14	12	40	20	54	23						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /UPPER/ ABOVE PECOS RIVER
STATION LOCATION RIO GRANDE AT
EL PASO, TEXAS 46

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	16	61	5100	0	0	540	0	150	0	150	4310	60	750	87	4	88	3	28	2	78	2	74	1										
1	8	62	18900	110	1130	50	0	540	20	20	17060	50	1350	88	6	78	6	74	4	17	3	91	3	87	3	51	2	80	1	97	1		
1	22	62	20500	340	90	1080	0	790	0	110	18060	20	500	88	6	78	6	44	3	51	2	91	2	87	2	3	1	57	1				
1	29	62	22800	0	50	50	0	590	0	320	21800	50	880	78	7	88	6	57	1	51	1												
2	5	62	6100	0	20	20	0	90	0	20	5990	0	1500	78	5	88	4	74	2														
2	26	62	7300	80	60	150	0	4270	0	290	2460	20	770	51	5	78	4	87	2	68	1	88	1	85	1	74	1						
3	5	62	5800	80	40	210	20	2840	20	230	2340	40	750	51	5	78	3	87	2	88	2	74	2	68	1	85	1						
3	12	62	4300	20	0	60	0	330	130	500	3290	100	1550	78	4	88	2	71	2	87	1	57	1	91	1								
3	19	62	2700	0	0	0	0	140	20	480	2080	110	500	78	4	66	2	91	1														
4	2	62	2200	40	0	150	0	330	120	230	1350	20	390	78	3	51	1	52	1	88	1												
4	16	62	2800	70	0	340	0	20	0	1100	1310	950	1220	78	3	71	3	25	2	68	1	69	1	88	1								
5	7	62	8300	60	20	1140	20	150	20	1550	5340	100	1280	78	4	92	4	25	2	44	2	79	1	38	1	66	1	91	1	24	1	88	1
5	21	62	1600	90	20	220	20	20	0	220	1050	0	670	78	1	68	1	25	1	92	1												
6	4	62	4500	100	0	230	40	580	0	810	2760	40	390	79	3	78	3	57	2	69	2	87	1	88	1								
6	18	62	3600	0	0	270	60	850	0	660	1740	100	190	78	8	57	3	71	2	79	2	69	1	25	1								
7	2	62	17400	0	0	1580	0	60	400	2410	12910	590	1390	78	5	79	5	71	4	88	4	44	4	92	3	97	3	87	3	66	3	74	2
7	16	62	4500	0	0	0	0	40	210	2110	2110	420	1060	71	4	78	3	69	2	62	1	79	1										
8	6	62	2200	0	40	60	140	120	0	1080	750	210	370	71	3	78	1	69	1														
8	20	62	6100	0	0	0	0	720	0	1770	3630	680	590	71	4	78	4	51	3	92	2	88	2	97	2	79	1	98	1				
9	4	62	500	0	0	20	0	10	0	250	220	180	260	71	1																		
9	17	62	1200	0	10	140	0	0	0	260	790	200	540	87	1	88	1																

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /UPPER/ ABOVE PECOS RIVER
STATION LOCATION RIO GRANDE AT
EL PASO, TEXAS 046

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																		NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														ROTIFERS											CRUSTACEA								
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	16	61	65	27	12	9	70	8	66	5	51	0	0	4											0							0	0
1	8	62	71	32	12	30	4	12	85	4	22	20	0	3											0							0	3
1	22	62	71	50	12	41	85	2	71	2	5	90	0	0											2							0	0
1	29	62	12	49	71	39	88	4	11	2	6	360	0	1											18	76	2	51	2			0	1
2	5	62	12	51	71	30	4	8	10	2	9	0	0	3											1							1	0
2	26	62	12	50	65	9	51	6	4	5	30	190	0	4											0							2	0
3	5	62	12	32	65	13	4	12	51	8	35	0	0	17	8	2									3							1	0
3	12	62	12	55	85	5	65	5	71	4	31	120	0	0											0							0	0
3	19	62	12	60	85	7	78	4	92	3	26	20	0	0											7	76	1					0	0
4	2	62	12	51	58	9	85	5	71	3	32	0	0	0											24	76	3	50	1	51	1	1	0
4	16	62	12	47	92	9	11	3	10	3	38	50	0	2											4	76	1					0	0
5	7	62	12	45	92	24	15	4	11	4	23	80	0	0											2							0	0
5	21	62	12	21	92	12	58	10	15	7	50	0	0	0											0							0	0
6	4	62	58	65	15	9	12	7	41	2	17	0	0	0											1							0	0
6	18	62	12	39	15	18	58	7	80	7	29	40	0	2											1							0	3
7	2	62	58	35	12	14	80	9	16	8	34	0	0	7	2	1									3							0	0
7	16	62	12	36	80	11	15	7	71	5	41	0	0	-											-							-	-
8	6	62	80	35	12	15	58	6	10	4	40	0	0	-											-							-	-
8	20	62	12	22	80	20	58	14	92	6	38	0	0	0											0							0	0
9	4	62	80	40	58	15	82	4	16	3	38	0	0	0											0							0	0
9	17	62	58	22	10	11	80	8	26	7	52	0	0	14	2	2									0							2	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE TEXAS

MAJOR BASIN WESTERN GULF

MINOR BASIN RIO GRANDE /UPPER/ ABOVE PECOS RIVER

STATION LOCATION RIO GRANDE AT
EL PASO, TEXAS 46

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
4	10	62	4	20	5258	138	37	101	1	10	14	2	1	11	0	4	3	1	4
5	15	62	5	23	6397	91	30	61	-	-	-	-	-	-	-	-	-	-	-
6	15	62	6	25	4567	123	36	87	-	-	-	-	-	-	-	-	-	-	-
6	15	62		*	10964	104	32	72	1	10	10	2	1	6	1	3	3	1	4
7	19	62	7	29	4747	105	29	76	-	-	-	-	-	-	-	-	-	-	-
8	30	62	9	14	5152	134	32	102	-	-	-	-	-	-	-	-	-	-	-
8	30	62		*	9899	120	31	89	1	7	10	1	1	7	1	4	2	1	6

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TEXAS

MAJOR BASIN WESTERN GULF

MINOR BASIN RIO GRANDE /UPPER/ ABOVE PECOS RIVER

STATION LOCATIONRIO GRANDE AT

EL PASO, TEXAS 46

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
11	14	61	18.0	-	8.3	-	-	-	-	-	72	142	236	5	820	148	.1	457	-
11	21	61	17.0	-	8.3	-	-	-	-	-	90	141	252	-	278	187	.0	544	-
1	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.5	-	-
1	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.6	-	-
1	22	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	1.0	-	-
1	29	62	-	-	-	-	-	-	-	-	-	-	-	10	-	-	.3	-	-
2	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.2	-	-
2	26	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	.8	-	-
3	5	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	.9	-	-
3	19	62	-	9.4	8.2	1.7	-	1.4	1.7	-	120	171	294	5	480	216	.4	568	-
3	26	62	17.2	7.8	8.2	4.9	-	1.6	2.4	-	115	172	260	15	280	228	.1	690	-
4	2	62	17.8	8.9	8.2	1.6	-	1.4	1.8	-	120	178	262	10	260	224	.3	724	-
4	9	62	17.0	8.3	8.1	4.6	-	1.4	1.7	-	135	192	320	-	150	231	-	731	-
4	16	62	17.5	7.1	8.1	1.9	-	1.7	2.0	-	150	205	348	-	140	242	.2	928	-
4	20	62	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-
4	23	62	23.0	8.1	8.1	2.9	-	1.8	1.4	-	155	201	344	5	90	237	.1	909	-
4	30	62	23.0	7.9	8.1	4.1	-	1.4	1.8	-	190	215	368	5	65	355	.3	1094	-
5	7	62	25.0	8.1	8.3	4.3	-	-	1.6	-	170	196	350	5	120	251	.2	946	-
5	14	62	23.0	8.9	8.2	3.4	-	1.7	2.0	-	165	196	334	5	140	239	.0	898	-
5	21	62	22.0	8.8	8.2	3.2	-	1.7	1.9	-	150	194	324	0	145	306	.3	943	-
5	28	62	24.0	8.9	8.6	5.6	-	1.7	1.8	-	145	195	316	-	140	226	-	860	-
6	5	62	22.2	9.4	8.2	6.4	-	1.6	1.9	-	135	180	294	5	150	218	1.2	697	-
6	18	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	.0	-	-
6	25	62	24.3	9.7	8.2	6.6	-	1.4	1.6	-	135	184	284	5	180	240	.1	-	-
7	2	62	-	-	-	-	-	-	-	-	-	-	-	5	160	-	.0	-	-
7	9	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	.0	-	-
7	16	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	.1	-	-
7	23	62	-	-	-	-	-	-	-	-	-	-	-	10	-	-	.0	-	-
7	31	62	25.0	11.2	8.3	8.0	-	1.3	1.6	-	135	180	278	-	5700	240	-	674	-
8	6	62	25.0	11.4	8.2	.5	-	1.5	1.7	-	145	185	322	5	450	243	.0	844	-
8	13	62	25.0	6.2	8.2	3.0	-	1.6	-	-	140	170	299	5	380	247	.0	829	-
8	20	62	26.5	7.1	8.3	4.1	-	1.7	1.9	-	93	164	240	0	250	225	.1	748	-
8	27	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	.0	-	-
9	4	62	-	-	-	-	-	-	-	-	-	-	-	10	-	-	.1	-	-
9	10	62	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-
9	17	62	-	-	-	-	-	-	-	-	-	-	-	5	-	-	.2	-	-
9	24	62	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Caballo Dam, New Mexico
Operated by U.S. Bureau of Reclamation

STATE	Texas
MAJOR BASIN	Western Gulf
MINOR BASIN	Rio Grande/Upper/above Pecos River
STATION LOCATION	Rio Grande at El Paso, Texas

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.0013	.0013	.0011	.0011	.0010	.0013	2.390	.752	1.590	2.360	.996	2.450
2	.0013	.0013	.0011	.0011	.0010	.0013	2.220	.848	1.640	2.280	1.000	2.450
3	.0013	.0013	.0011	.0011	.0010	.0013	2.050	.844	1.660	1.990	1.160	2.450
4	.0013	.0013	.0011	.0012	.0011	.0013	1.940	.883	1.610	1.890	1.370	2.030
5	.0013	.0013	.0011	.0012	.0011	.266	1.910	.943	1.530	1.850	1.380	1.090
6	.0013	.0013	.0011	.0011	.0011	1.610	1.700	.936	1.500	1.700	1.470	.788
7	.0013	.0013	.0010	.0011	.0012	1.810	1.500	.913	1.490	1.580	2.010	.899
8	.0013	.0013	.0010	.0011	.0012	1.900	1.400	1.010	1.690	1.550	2.530	1.210
9	.0013	.0014	.0010	.0011	.0012	1.910	1.230	1.130	1.870	1.450	2.740	1.030
10	.0014	.0014	.0010	.0011	.0012	1.920	1.150	1.150	1.860	1.540	2.910	.566
11	.0014	.0014	.0011	.0011	.0012	1.910	1.120	1.190	1.860	1.780	2.900	.269
12	.0013	.0014	.0011	.0011	.0012	2.000	1.070	1.240	1.980	1.790	2.880	.077
13	.0013	.0014	.0011	.0011	.0012	2.150	.943	1.230	2.090	1.840	2.890	.061
14	.0013	.0014	.0011	.0011	.0012	2.080	.864	1.210	2.100	1.880	2.740	.038
15	.0013	.0014	.0011	.0010	.0012	1.990	.843	1.160	2.270	1.900	2.590	.0028
16	.0014	.0014	.0011	.0010	.0012	2.250	.822	1.180	2.420	1.930	2.590	.0028
17	.0014	.0014	.0011	.0011	.0012	2.500	.918	1.200	2.400	2.050	2.440	.0028
18	.0014	.0014	.0011	.0012	.0013	2.500	1.050	1.130	2.320	2.090	2.290	.0028
19	.0013	.0014	.0011	.0012	.0013	2.500	1.050	1.080	2.260	1.900	2.270	.0028
20	.0013	.0013	.0011	.0012	.0013	2.610	1.070	1.080	2.170	1.870	2.260	.0025
21	.0013	.0012	.0011	.0012	.0013	2.750	1.060	1.090	2.140	1.980	2.100	.0022
22	.0013	.0011	.0012	.0011	.0013	2.750	.989	1.140	2.240	1.980	1.940	.0022
23	.0013	.0011	.0012	.0011	.0012	2.750	.862	1.190	2.350	1.980	1.900	.0021
24	.0013	.0011	.0012	.0011	.0012	2.760	.793	1.180	2.340	1.980	1.990	.0020
25	.0013	.0011	.0012	.0011	.0012	2.760	.714	1.250	2.310	1.890	2.080	.0021
26	.0013	.0011	.0012	.0011	.0013	2.750	.714	1.350	2.080	1.750	2.070	.0023
27	.0013	.0011	.0012	.0011	.0013	2.650	.704	1.360	1.980	1.710	2.060	.0024
28	.0013	.0012	.0011	.0012	.0013	2.470	.704	1.350	2.120	1.650	2.170	.0023
29	.0013	.0012	.0011	.0012		2.350	.686	1.480	2.230	1.050	2.280	.0023
30	.0013	.0011	.0011	.0012		2.390	.695	1.560	2.270	.344	2.280	.0022
31	.0013		.0011	.0012		2.420		1.560		.986	2.360	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE COLORADO
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /UPPER/ ABOVE PECOS RIVER
STATION LOCATION RIO GRANDE BELOW
ALAMOSA, COLORADO 72

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
NO.	DAY	YR.	NO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	NO.	DAY	µµc/g	±	µµc/g	±
10	3	61	10	13	0	1	4	2	4	2	4	10	19	17	23	20						
10	16	61	10	31	0	0	1	1	1	1	3	4	11	6	14	7						
10	30	61	11	15	0	1	2	2	2	2	16	4	46	7	62	8						
11	27	61	12	8	0	1	1	1	1	1	2	6	13	7	15	9						
1	2	62	1	15	0	1	1	1	1	1	2	4	5	5	7	6						
1	11	62	1	22	0	1	1	1	1	1	4	4	7	5	11	6						
1	22	62	2	2	0	0	2	1	2	1	3	5	8	7	11	9						
1	29	62	2	9	0	1	1	1	1	1	5	4	11	5	16	6						
2	12	62	2	28	0	1	0	1	0	1	19	3	26	4	45	5						
2	19	62	3	5	0	1	1	1	1	1	17	5	27	5	44	7						
2	27	62	3	15	0	1	1	2	1	2	16	4	18	6	34	7						
3	5	62	3	20	0	1	1	1	1	1	8	6	20	7	28	9						
3	19	62	4	2	1	1	2	1	3	1	3	4	13	6	16	7						
3	26	62	4	6	0	1	0	1	0	1	21	4	33	5	54	6						
4	3	62	4	20	0	1	1	1	1	1	17	5	20	5	37	7						
4	9	62	4	25	0	1	3	2	3	2	28	5	31	6	59	7						
4	16	62	4	30	2	1	1	1	3	1	42	6	28	6	70	8						
5	15	62	6	22	1	1	0	1	1	1	21	6	22	7	43	9						
6	11	62	7	9	0	1	0	1	0	1	6	6	19	8	25	10						
7	18	62	8	14	0	1	0	3	0	3	62	12	26	15	88	19						
8	14	62	9	5	0	1	4	3	4	3	1	5	11	7	12	8						
9	4	62	9	20	0	1	3	2	3	2	8	9	15	13	23	16						
9	19	62	10	10	0	1	3	2	3	2	34	6	15	8	49	10						
9	24	62	10	15	1	1	0	0	1	1	0	13	18	7	18	15						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE COLORADO
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /UPPER/ ABOVE PECOS RIVER
STATION LOCATION RIO GRANDE BELOW
ALAMOSA, COLORADO 72

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	3	61	1900	0	0	150	0	190	0	660	890	150	1120	68	2	84	2	92	1	71	1												
10	16	61	2300	0	0	130	0	250	0	540	1340	3330	470	84	2	68	2	92	1	57	1												
10	30	61	1600	0	0	0	0	100	0	210	1260	0	870	84	2	82	1	92	1														
11	27	61	1600	0	0	20	0	150	0	170	1220	20	460	84	1	92	1	82	1														
1	2	62	900	20	0	360	0	70	0	20	470	50	860	24	1	84	1																
1	22	62	2100	160	20	810	0	160	0	50	920	20	360	24	2	82	1	28	1	84	1												
2	12	62	1700	0	0	20	0	440	0	190	1070	20	150	51	2	82	2	85	1	91	1	92	1										
3	5	62	3300	230	0	60	0	230	60	170	2570	80	730	84	2	3	1	51	1	82	1	85	1										
3	19	62	6100	130	0	60	0	270	80	310	5220	210	1640	92	4	88	3	84	3	91	3	82	2	85	2	87	2	78	1	51	1	68	1
4	3	62	8900	80	40	80	0	1370	40	790	6540	170	1410	92	4	51	3	88	3	68	3	82	3	97	2	85	2	91	2	98	1	80	1
4	16	62	13000	170	80	210	0	660	120	80	11720	250	2570	92	5	82	5	88	3	77	3	85	3	51	2	98	2	79	2	91	1	97	1
4	30	62	5900	80	20	510	0	190	530	130	4470	80	3740	84	4	92	3	62	2	82	1	88	1	25	1	79	1	91	1				
5	15	62	4500	0	0	120	0	440	0	120	3850	20	230	92	3	84	3	88	2	57	2	87	1	91	1	97	1						
6	12	62	2900	0	0	330	0	80	0	370	2110	100	520	92	3	79	1	38	1	68	1	88	1	84	1								
7	18	62	6100	0	0	1100	0	130	20	2240	2660	420	1820	68	4	88	2	79	2	38	2	85	2	87	2	92	1						
8	14	62	9900	170	0	1530	0	1780	80	3970	2360	2240	1160	68	5	92	3	57	3	25	3	51	3	84	2	44	1	38	1				
9	4	62	4200	20	0	270	0	180	0	3510	200	2770	2140	68	5	56	1	38	1														
9	19	62	13900	170	210	870	0	80	0	6200	6410	1270	5280	92	4	87	4	88	3	82	2	97	2	38	2	79	1	81	1	17	1	71	1

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE COLORADO

MAJOR BASIN WESTERN GULF

MINOR BASIN RIO GRANDE /UPPER/ ABOVE PECOS RIVER

STATION LOCATION RIO GRANDE BELOW

ALAMOSA, COLORADO 072

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Unidentifiable) Number per ml.	MICRO INVERTEBRATES																		NEMATODES (Unidentifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA								
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	3	61	46	22	92	20	45	9	36	9	40	0	0	16	15	1									0							0	0
10	16	61	46	25	36	21	92	17	48	7	30	20	0	5											0							0	0
10	30	61	46	30	36	20	92	13	70	4	33	20	0	2											0							0	0
11	27	61	46	22	36	21	92	19	51	4	34	40	0	0											8	51	2					0	0
1	2	62	46	24	36	20	92	13	51	7	36	0	0	0											0							0	0
1	22	62	36	33	46	15	92	13	51	10	29	160	0	0											0							0	0
2	12	62	36	23	51	15	46	8	92	7	47	0	0	1											0							0	0
3	5	62	46	17	36	17	51	10	92	8	48	80	0	2											0							0	1
3	19	62	92	19	86	12	48	8	36	8	53	20	0	7	20	1									0							1	0
4	3	62	92	22	46	15	36	7	86	4	52	40	0	4											1							0	1
4	16	62	92	33	36	19	48	11	46	6	31	0	0	1											0							0	0
4	30	62	92	28	46	15	36	8	48	8	41	110	0	0											1							0	1
5	15	62	48	36	92	22	71	3	86	3	36	0	0	0											0							1	0
6	12	62	92	27	16	10	48	7	45	6	50	0	0	1											0							1	0
7	18	62	26	19	46	16	48	10	70	9	46	0	0	8											0							0	1
8	14	62	26	40	92	25	46	6	65	2	27	0	0	40	15	3	18	1	22	1					0							0	0
9	4	62	26	71	92	4	65	3	46	3	19	0	0	49	6	2	11	1	17	1	15	1			0							3	0
9	19	62	26	36	92	14	46	7	70	4	39	0	0	28	4	1	15	1							0							1	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE COLORADO
MAJOR BASIN WESTERN GULF
MINOR BASIN RIO GRANDE /UPPER/ ABOVE PECOS RIVER
STATION LOCATION RIO GRANDE BELOW
ALAMOSA, COLORADO 72

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	-	-	7.5	-	-	-	-	-	15	116	168	5	0	117	.1	-	-
10	30	61	-	-	-	-	-	-	-	-	11	96	124	5	0	84	-	-	80
11	27	61	-	-	-	-	-	-	-	-	6	88	96	-	-	49	-	-	-
1	2	62	-	-	-	-	-	-	-	-	4	74	80	0	-	29	.0	-	-
1	11	62	-	-	-	-	-	-	-	-	7	-	108	-	-	29	-	-	1700
1	22	62	-	-	-	-	-	-	-	-	4	74	176	-	-	25	.0	-	2400
1	29	62	-	-	-	-	-	-	-	-	5	-	116	10	-	30	.0	-	2400
2	19	62	-	-	-	-	-	-	-	-	-	-	-	15	-	38	-	-	-
3	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	360
3	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	190
4	3	62	8.0	-	7.6	-	-	-	-	-	11	82	100	10	-	40	.1	-	-
4	9	62	9.0	-	8.2	-	-	-	-	-	11	96	112	10	-	65	-	242	110
4	16	62	-	-	-	-	-	-	-	-	9	76	88	20	-	50	.0	-	-
4	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*100
5	15	62	-	-	7.4	-	-	-	-	-	7	54	96	15	-	46	-	-	-
7	18	62	-	-	-	-	-	-	-	-	20	152	-	10	25	200	-	542	-
8	14	62	-	-	7.9	-	-	-	-	-	13	150	176	5	*25	155	.1	443	-
9	4	62	-	-	-	-	-	-	-	-	13	132	156	0	25	100	.0	-	-
9	19	62	-	-	7.8	-	-	-	-	-	9	132	148	5	*25	100	-	350	-
9	24	62	-	-	8.1	-	-	-	-	-	4	40	80	10	130	35	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Lobatos, Colorado
Operated by U. S. Geological Survey

STATE	**Colorado**
MAJOR BASIN	**Western Gulf**
MINOR BASIN	**Rio Grande/Upper/above Pecos River**
STATION LOCATION	**Rio Grande below Alamosa, Colorado**

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.069	.163	.384	.270	.500	.479	.390	1.680	.531	.280	.150	.082
2	.071	.251	.406	.270	.500	.525	.496	1.380	.554	.289	.144	.076
3	.073	.681	.423	.270	.500	.612	.513	1.240	.586	.298	.131	.073
4	.069	.854	.418	.270	.500	.519	.537	1.280	.632	.289	.120	.069
5	.062	.883	.401	.270	.500	.479	.508	1.340	.753	.322	.108	.069
6	.062	.717	.384	.270	.500	.446	.462	1.490	1.010	.353	.114	.062
7	.065	.542	.384	.270	.500	.502	.462	1.620	1.190	.374	.108	.069
8	.062	.502	.289	.270	.500	.468	.446	1.820	1.050	.468	.100	.067
9	.071	.468	.210	.270	.500	.434	.479	1.970	.892	.451	.092	.085
10	.076	.474	.160	.270	.500	.418	.502	2.150	.802	.446	.082	.085
11	.071	.537	.110	.270	.500	.412	.508	2.290	.854	.401	.076	.078
12	.073	.531	.115	.270	.500	.342	.485	2.130	.951	.368	.076	.078
13	.111	.450	.210	.270	.500	.303	.474	1.950	.836	.342	.069	.073
14	.108	.505	.230	.270	.500	.272	.490	1.790	.864	.332	.053	.071
15	.111	.468	.260	.270	.500	.332	.632	1.770	.951	.294	.049	.062
16	.114	.485	.265	.270	.500	.379	.811	1.340	1.060	.259	.047	.062
17	.102	.479	.270	.270	.639	.457	1.080	1.040	1.120	.231	.044	.058
18	.092	.470	.270	.270	.605	.395	1.570	1.030	.962	.199	.044	.056
19	.090	.455	.270	.270	.573	.379	1.930	.802	.777	.181	.039	.056
20	.088	.445	.270	.270	.560	.368	2.250	.653	.612	.117	.044	.062
21	.085	.395	.275	.270	.592	.358	2.480	.625	.508	.065	.053	.069
22	.085	.375	.275	.270	.525	.348	2.510	.681	.479	.051	.065	.065
23	.080	.370	.270	.270	.485	.342	2.340	.580	.485	.051	.054	.065
24	.069	.355	.265	.270	.496	.322	1.870	.537	.412	.067	.053	.067
25	.073	.342	.265	.270	.485	.289	1.620	.519	.353	.085	.125	.073
26	.102	.348	.265	.270	.490	.272	1.730	.474	.368	.085	.090	.065
27	.105	.379	.265	.270	.423	.259	1.770	.479	.418	.098	.085	.056
28	.095	.390	.265	.270	.418	.272	1.640	.605	.358	.114	.078	.054
29	.098	.390	.265	.270		.308	1.640	.674	.322	.276	.080	.054
30	.111	.390	.265	.270		.353	1.750	.605	.327	.177	.080	.054
31	.131		.265	.270		.384		.513		.160	.088	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE VIRGINIA
MAJOR BASIN SOUTHEAST
MINOR BASIN ROANOKE RIVER
STATION LOCATION ROANOKE RIVER AT
JOHN H KERR RESR & DAM, VIRGINIA 91

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
NO.	DAY	YR.	NO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	NO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	18	0	0	0	0	0	0	1	4	9	4	10	6						
10	9	61	10	18	0	0	0	0	0	0	7	4	1	4	8	6						
10	16	61	10	31	0	1	0	1	0	1	0	4	4	4	4	6						
10	23	61	11	2	0	0	0	1	0	1	2	4	7	4	9	6						
10	30	61	11	7	0	1	0	1	0	1	6	5	7	5	13	7						
11	6	61	11	16	0	1	0	1	0	1	1	4	8	4	9	6						
11	13	61	11	24	0	1	0	1	0	1	0	5	4	5	4	7						
11	20	61	11	30	0	0	0	0	0	0	0	4	7	4	7	6						
11	27	61	12	6	0	0	0	1	0	1	5	4	7	4	12	6						
12	4	61	12	12	0	1	0	1	0	1	8	6	9	6	17	8						
12	11	61	12	26	0	1	0	1	0	1	1	4	10	4	11	6						
12	18	61	12	28	0	1	0	1	0	1	11	4	13	4	24	6						
12	26	61	1	4	0	1	0	1	0	1	21	4	13	4	34	6						
1	2	62	1	12	0	1	0	0	0	1	16	4	120	4	46	6						
1	8	62	1	18	1	1	0	1	1	1	23	5	15	5	38	7						
1	15	62	1	26	1	1	0	1	1	1	74	6	27	5	101	8						
1	22	62	2	1	0	1	0	1	0	1	33	5	17	4	50	7						
1	29	62	2	12	1	1	0	1	1	1	41	6	18	5	59	9						
2	5	62	2	13	1	1	1	1	2	1	23	5	26	5	49	7						
2	12	62	2	21	1	1	0	1	1	1	51	6	22	5	73	8						
2	19	62	3	2	0	1	0	0	0	1	38	5	22	5	60	7						
2	26	62	3	12	0	1	0	1	0	1	28	5	12	4	40	6						
3	5	62	3	16	1	1	0	1	1	1	43	6	22	5	65	7						
3	12	62	3	22	0	1	0	1	0	1	69	7	37	5	106	9						
3	19	62	3	28	0	1	0	1	0	1	33	5	19	5	52	7						
3	26	62	4	3	1	1	0	0	1	1	46	6	19	4	65	7						
4	2	62	4	16	1	1	0	0	1	1	39	5	26	5	65	7						
4	9	62	4	23	0	0	0	0	0	0	37	5	15	4	52	6						
4	16	62	4	27	0	1	0	1	0	1	32	5	21	5	53	7						
4	23	62	5	25	0	1	0	1	0	1	25	7	24	7	49	10						
4	30	62	5	25	0	1	0	1	0	1	17	6	19	6	36	8						
5	7	62	6	12	1	1	0	1	1	1	12	7	23	8	35	11						
5	14	62	6	25	0	0	0	1	0	1	16	5	14	5	30	7						
5	21	62	6	26	0	0	0	0	0	0	18	6	11	6	29	8						
5	28	62	6	28	0	1	0	1	0	1	11	5	12	6	23	8						
6	4	62	7	5	0	0	0	0	0	0	8	5	14	6	22	8						
6	11	62	7	9	0	1	0	1	0	1	10	5	18	7	28	9						
6	18	62	7	20	0	1	0	1	0	1	9	5	10	5	19	7						
7	16	62	8	2	1	1	0	1	1	1	13	7	9	5	22	9						
7	23	62	8	15	0	1	1	1	1	1	8	7	14	6	22	9						
7	30	62	8	17	1	1	0	1	1	1	12	6	18	6	30	8						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE VIRGINIA
MAJOR BASIN SOUTHEAST
MINOR BASIN ROANOKE RIVER
STATION LOCATION ROANOKE RIVER AT
JOHN H KERR RESR & DAM, VIRGINIA 91

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
8	6	62	8	23	0	0	0	0	0	0	7	7	6	6	13	9						
8	13	62	9	6	0	1	0	1	0	1	12	14	9	6	21	15						
8	20	62	10	8	0	1	0	1	0	1	2	11	12	6	14	12						
8	27	62	9	14	1	1	0	1	1	1	0	7	2	8	2	11						
9	4	62	9	19	0	0	0	0	0	0	4	5	6	5	10	7						
9	17	62	10	15	0	1	0	1	0	1	1	5	15	6	16	7						
9	24	62	10	18	0	1	0	1	0	1	4	6	11	6	15	8						

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NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE VIRGINIA

MAJOR BASIN SOUTHEAST

MINOR BASIN ROANOKE RIVER

STATION LOCATION ROANOKE RIVER AT

JOHN H KERR RESR & DAM, VIRGINIA 91

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	200	0	0	0	0	20	0	170	0	40	0																				
10	2	61	100	0	0	0	0	0	40	40	0	20	0																				
10	16	61	00	0	0	0	0	0	0	20	20	0	0																				
10	16	61	200	0	0	40	0	0	0	120	60	0	20																				
11	6	61	100	0	20	0	0	0	0	120	0	0	20																				
11	6	61	100	0	0	0	0	0	0	120	0	0	0																				
11	20	61	100	20	0	0	0	20	0	90	0	20	0																				
11	20	61	100	0	0	20	0	20	0	40	20	0	0																				
12	4	61	500	0	0	20	0	40	0	390	40	100	20	69	1																		
12	18	61	200	0	0	0	0	20	0	210	20	40	0																				
1	2	62	300	0	0	0	0	40	0	200	20	20	0																				
1	15	62	200	0	20	0	0	50	20	50	20	50	50																				
2	5	62	200	0	0	0	0	50	0	110	50	70	50																				
2	19	62	600	0	0	0	0	50	450	90	50	20	20	62	2																		
3	5	62	600	0	0	0	0	0	340	50	180	0	50	62	2																		
3	19	62	400	0	0	0	0	160	130	20	70	90	20																				
4	2	62	900	0	0	0	0	150	460	230	20	20	40	62	2	69	1																
4	16	62	300	0	0	0	0	90	20	180	20	130	90	69	1																		
5	7	62	600	0	0	0	0	190	20	330	20	20	0	69	1	57	1																
5	21	62	700	0	0	0	0	0	0	460	210	0	0	69	1																		
6	4	62	500	0	20	0	0	0	0	430	50	70	0	69	2																		
6	18	62	300	0	0	20	0	0	0	190	100	0	40	69	1																		
7	2	62	300	0	0	20	0	0	0	230	40	20	0																				
7	16	62	00	0	0	0	0	0	0	0	40	0	0																				
8	6	62	300	0	0	0	40	60	0	120	60	60	0																				
8	20	62	100	0	0	0	0	0	0	120	0	0	0																				
9	4	62	300	80	0	130	0	40	0	40	40	40	80																				
9	19	62	200	0	70	70	0	10	10	30	0	20	10																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE VIRGINIA
MAJOR BASIN SOUTHEAST
MINOR BASIN ROANOKE RIVER
STATION LOCATION ROANOKE RIVER AT
JOHN H KERR RESR & DAM, VIRGINIA 091

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	58	44	56	25	57	18	28	6	7	0	0	2											1							0	0
10	2	61	58	63	56	12	57	9	47	5	11	1300	0	5											6	50	1					0	0
10	16	61	58	76	56	10	57	8	28	3	3	640	0	–											–							–	–
10	16	61	58	84	57	6	56	6	28	3	1	100	0	94	17	4	22	2	10	1	46	1			7	76	1					0	0
11	6	61	58	57	57	19	47	6	56	5	13	100	0	168	17	5	11	2	22	1	21	1			2							0	0
11	6	61	58	56	56	23	57	16	28	2	3	310	0	3											3							0	0
11	20	61	58	74	56	10	57	9	28	3	4	0	0	5											1							0	0
11	20	61	58	68	57	13	56	11	47	3	5	0	0	0											0							0	0
12	4	61	58	59	56	20	57	13	82	3	5	40	0	4											0							0	0
12	18	61	58	36	57	18	56	16	82	14	16	0	0	2											1							0	0
1	2	62	27	23	56	23	57	16	58	12	26	0	10	4											0							0	0
1	15	62	56	72	57	8	58	6	82	3	11	0	0	2											0							0	0
2	5	62	56	61	58	16	57	11	28	2	10	0	10	2											1							0	0
2	19	62	56	57	58	9	27	8	82	5	21	0	0	0											0							0	0
3	5	62	56	22	57	17	27	15	9	14	32	0	10	1											0							0	0
3	19	62	56	66	57	9	58	8	27	4	13	0	0	3											0							0	0
4	2	62	56	76	57	9	58	5	9	3	7	0	20	5											1							0	0
4	16	62	57	34	82	15	56	13	58	8	30	0	0	14	17	1	11	1							3	50	1					0	0
5	7	62	56	84	57	10	58	2	28	1	3	1860	0	3											0							0	0
5	21	62	56	88	57	5	28	3	82	2	2	0	0	3											1							0	0
6	4	62	56	41	58	24	57	13	28	10	12	0	0	0											1							0	0
6	18	62	58	49	47	25	56	19	57	4	3	0	10	3											1							0	1
7	2	62	58	50	56	17	47	15	57	12	6	0	0	1											1							0	0
7	16	62	58	64	56	15	57	9	47	5	7	0	0	8											0							0	0
8	6	62	56	38	58	33	57	11	28	8	10	0	0	6											0							0	9
8	20	62	58	25	56	22	57	20	28	14	19	0	0	0											0							0	0
9	4	62	58	37	56	28	28	16	57	14	5	0	0	0											6							0	70
9	19	62	58	44	57	15	56	13	28	6	22	0	0	146	11	4	17	3	22	3	21	3	5	1	59	50	4	76	4	53	2	0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE VIRGINIA

MAJOR BASIN SOUTHEAST

MINOR BASIN ROANOKE RIVER

STATION LOCATION ROANOKE RIVER AT
JOHN H KERR RESR & DAM, VIRGINIA 91

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	2	61	10	19	4940	305	81	224	2	19	20	3	1	14	2	10	8	2	20
11	6	61	11	22	4760	284	104	180	9	28	18	1	1	14	2	8	14	1	26
12	4	61	12	19	4570	301	91	210	7	23	20	1	1	17	1	9	9	2	21
1	2	62	1	24	4850	278	98	180	7	29	19	1	1	15	2	8	10	2	23
2	5	62	2	21	4790	306	105	201	19	28	20	1	1	18	0	7	8	1	22
3	5	62	3	21	4940	293	109	184	8	27	25	2	1	21	1	12	10	1	26
4	2	62	4	18	4800	276	130	146	8	34	26	2	1	22	1	17	12	1	32
5	7	62	5	23	4850	236	141	95	21	40	18	1	1	15	1	9	20	1	32
6	4	62	6	19	4580	272	123	149	8	33	17	1	1	15	0	11	15	1	38
7	2	62	7	19	4970	228	117	111	6	29	21	1	1	18	1	13	15	1	32
8	6	62	8	22	4930	268	91	177	5	24	18	1	1	15	1	10	11	1	22
9	4	62	9	21	5000	224	95	129	6	23	17	1	1	15	0	11	12	1	25

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE VIRGINIA

MAJOR BASIN SOUTHEAST

MINOR BASIN ROANOKE RIVER

STATION LOCATION ROANOKE RIVER AT
JOHN H KERR RESR & DAM, VIRGINIA 91

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	19	61	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-
11	13	61	-	-	-	-	-	-	-	-	-	-	-	-	-	9	.1	-	-
11	20	61	-	-	-	-	-	-	-	-	-	-	-	-	-	6	.1	-	-
11	22	61	-	-	-	-	13	-	-	-	-	-	-	-	-	8	.0	-	-
11	27	61	-	-	-	-	-	-	-	-	-	-	-	-	-	10	.0	-	-
12	11	61	-	-	-	-	-	-	-	-	-	-	-	-	-	7	.0	-	-
12	18	61	-	-	-	-	-	-	-	-	-	-	-	-	-	11	.1	-	-
12	19	61	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-
12	26	61	-	-	-	-	-	-	-	-	-	36	-	-	-	15	.1	-	-
1	2	62	-	-	-	-	-	-	-	-	-	-	-	-	75	10	.3	-	-
1	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-
1	24	62	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-
1	29	62	-	-	-	-	-	-	-	-	-	-	52	-	-	18	-	-	-
2	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	19	.0	-	-
2	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	14	-	-	-
2	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-
2	21	62	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-
3	21	62	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
3	26	62	-	-	-	-	-	-	-	-	-	24	-	-	0	13	.0	-	-
4	2	62	-	-	-	-	-	-	-	-	-	28	-	-	-	5	-	36	-
4	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	11	.0	81	-
4	18	62	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-	-
4	23	62	-	-	-	-	-	-	-	-	-	32	-	-	-	7	.0	-	-
4	30	62	-	-	-	-	-	-	-	-	-	32	-	-	-	12	.0	-	-
5	14	62	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	-
5	21	62	-	-	-	-	-	-	-	-	-	-	-	-	-	10	.0	-	-
5	23	62	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
5	28	62	-	-	-	-	-	-	-	-	5	-	-	-	-	10	.0	-	-
6	4	62	-	-	-	-	-	-	-	-	-	28	-	-	-	10	.0	-	-
6	11	62	-	-	-	-	-	-	-	-	-	28	-	-	-	10	.0	-	-
7	19	62	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-	-
7	23	62	-	-	-	-	-	-	-	-	-	28	-	-	25	7	.0	67	-
8	6	62	-	-	-	-	-	-	-	-	-	-	-	-	*25	6	-	67	-
8	20	62	-	-	-	-	-	-	-	-	-	32	-	-	*25	4	-	72	-
8	23	62	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-
9	17	62	-	-	-	-	-	-	-	-	-	34	-	-	*25	73	-	76	-
9	21	62	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Buggs Island, Virginia
Operated by U.S. Geological Survey

STATE	**Virginia**
MAJOR BASIN	**Southeast**
MINOR BASIN	**Roanoke River**
STATION LOCATION	**Roanoke River at** **John H. Kerr Reservoir & Dam, Va.**

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.210	4.400	5.740	9.900	16.000	17.000	.304	6.690	6.420	1.500	6.240	.240
2	5.360	4.800	1.780	13.500	14.100	16.500	11.600	6.720	4.620	18.700	5.960	.235
3	4.890	4.600	.720	16.100	4.880	5.820	18.000	5.840	2.130	17.500	4.020	.240
4	3.310	2.800	7.590	15.200	4.260	2.400	17.600	6.830	7.580	4.230	.505	7.840
5	5.320	.730	7.100	15.500	14.700	17.200	16.900	3.140	6.700	18.400	.250	7.560
6	4.100	5.800	5.680	8.900	15.800	14.300	14.900	2.660	7.170	15.600	8.140	3.700
7	.997	4.200	7.500	2.490	18.000	17.000	.292	10.600	7.000	.332	6.120	3.150
8	.200	4.700	6.620	11.800	18.500	18.200	1.150	8.080	7.420	.310	8.100	.245
9	6.600	5.400	3.240	13.700	16.700	18.400	18.700	8.760	4.560	6.420	3.400	.240
10	4.700	3.200	2.050	15.000	6.020	6.780	17.500	9.740	2.080	4.960	3.660	9.990
11	4.700	1.000	6.340	15.000	1.200	.825	19.400	9.820	9.740	6.380	.240	7.080
12	4.000	.200	8.440	18.100	18.900	14.500	9.720	8.520	8.310	6.680	.405	4.500
13	3.100	5.100	8.280	17.800	14.100	15.900	19.600	3.230	8.040	6.010	7.680	9.270
14	.680	3.800	7.960	15.300	12.300	17.800	20.400	9.530	16.300	.930	8.700	7.300
15	.200	3.200	8.060	17.500	13.000	18.400	15.400	9.860	18.400	.310	8.510	.225
16	4.000	3.990	3.890	16.000	14.500	17.500	19.800	8.200	16.800	5.940	10.000	.225
17	2.800	4.020	2.200	17.400	2.800	19.500	18.000	6.800	17.000	3.380	7.800	4.480
18	3.800	2.780	9.020	18.000	.310	16.400	20.500	10.300	20.300	5.240	.590	2.330
19	3.500	.250	14.300	17.000	5.610	20.200	18.200	7.460	18.500	5.790	.240	2.410
20	4.800	5.800	17.200	7.130	11.900	18.600	18.800	4.430	18.400	6.270	9.640	2.480
21	2.500	5.610	13.700	5.000	11.600	13.000	6.640	10.200	19.800	2.220	8.950	2.340
22	.200	4.790	13.700	13.600	12.400	18.000	1.080	6.280	18.900	.298	4.340	.245
23	7.400	2.810	8.080	12.900	14.400	18.200	15.900	6.300	1.280	6.980	3.370	.235
24	6.400	4.740	8.080	14.900	9.480	11.300	19.400	7.690	.378	5.020	6.080	4.100
25	8.200	2.020	7.960	12.600	9.560	6.010	15.600	6.530	9.390	3.700	1.340	4.960
26	6.800	.790	14.100	17.200	18.200	18.400	17.300	3.500	13.000	4.820	.975	5.170
27	6.700	8.120	13.600	10.700	17.100	17.600	15.800	2.840	15.500	3.220	9.420	7.060
28	3.900	7.610	15.600	6.000	16.100	18.200	4.530	5.580	12.100	.268	5.080	7.470
29	.570	6.780	14.800	19.000		15.500	2.020	8.750	14.900	.298	5.110	.225
30	5.900	6.760	10.300	16.900		11.700	7.240	2.640	8.060	5.590	6.680	.215
31	4.000		4.340	16.500		.292		7.060		13.700	7.720	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE	TEXAS
MAJOR BASIN	WESTERN GULF
MINOR BASIN	SABINE RIVER
STATION LOCATION	SABINE RIVER NEAR RULIFF, TEXAS

73

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES											
BEGINNING			END								NEUTRALS									
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	19	61	11	13	5000	230	99	131	2	22	25	2	1	21	1	12	13	2	[illegible]3
12	1	61	12	24	5000	363	154	209	5	37	26	2	1	22	1	17	22	3	6[illegible]
1	27	62	2	13	5000	280	106	174	7	27	17	3	2	12	0	10	14	1	3[illegible]
3	1	62	3	17	5000	261	53	208	1	10	16	2	1	12	1	8	6	1	11
4	7	62	5	11	5000	230	95	135	2	25	21	0	2	19	0	15	12	1	19
7	17	62	7	23	3910	224	108	116	1	25	28	4	1	21	2	13	13	1	27
8	1	62	8	3	300	*	-	-	-	-	-	-	-	-	-	-	-	-	-

* LOW FLOW - NOT PROCESSED

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN SABINE RIVER
STATION LOCATION SABINE RIVER NEAR
RULIFF, TEXAS 73

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	16	-	-	-	-	-	-	4	5	6	5	10	7						
10	9	61	10	25	-	-	-	-	-	-	5	6	4	6	9	8						
10	16	61	10	31	-	-	-	-	-	-	4	6	5	7	9	9						
11	6	61	11	17	1	1	0	0	1	1	13	4	12	5	25	6						
11	13	61	11	24	-	-	-	-	-	-	16	5	17	6	33	8						
11	20	61	11	30	-	-	-	-	-	-	8	6	34	6	42	8						
11	27	61	12	4	0	1	0	1	0	1	31	5	32	5	63	7						
12	4	61	12	12	-	-	-	-	-	-	16	6	25	6	41	8						
12	11	61	12	22	-	-	-	-	-	-	20	6	37	7	57	9						
12	18	61	1	5	-	-	-	-	-	-	63	6	53	5	116	8						
12	26	61	1	10	1	1	1	1	2	1	25	5	66	5	91	7						
1	8	62	1	22	-	-	-	-	-	-	49	6	127	8	176	10						
1	15	62	1	25	-	-	-	-	-	-	73	8	52	7	125	11						
1	22	62	2	2	0	1	0	1	0	1	25	5	22	5	47	7						
1	29	62	2	13	-	-	-	-	-	-	42	7	36	6	78	9						
2	5	62	2	16	-	-	-	-	-	-	55	7	42	7	97	10						
2	12	62	2	28	-	-	-	-	-	-	41	4	53	5	94	6						
2	19	62	3	21	0	1	0	1	0	1	96	7	65	7	161	10						
2	26	62	3	14	-	-	-	-	-	-	47	5	38	6	85	7						
3	7	62	3	20	-	-	-	-	-	-	66	7	38	7	104	10						
3	11	62	3	26	-	-	-	-	-	-	24	6	27	7	51	9						
3	19	62	4	4	-	-	-	-	-	-	22	6	72	8	94	10						
3	26	62	4	10	0	1	0	1	0	1	42	5	32	5	74	7						
4	2	62	4	13	-	-	-	-	-	-	57	7	54	7	111	10						
4	9	62	4	27	-	-	-	-	-	-	22	6	34	7	56	9						
4	16	62	5	1	-	-	-	-	-	-	25	6	28	7	53	9						
4	23	62	5	28	0	1	0	1	0	1	21	6	24	6	45	8						
4	30	62	6	4	-	-	-	-	-	-	43	8	36	9	79	12						
5	7	62	6	21	-	-	-	-	-	-	42	27	0	26	42	37						
5	14	62	6	25	0	1	0	1	0	1	20	6	43	7	63	9						
5	21	62	6	26	-	-	-	-	-	-	28	7	45	8	73	11						
5	28	62	6	28	1	1	1	1	2	1	15	6	16	8	31	10						
6	4	62	7	5	-	-	-	-	-	-	24	10	31	8	55	13						
6	11	62	7	10	-	-	-	-	-	-	37	12	50	7	87	14						
6	18	62	8	3	0	0	0	1	0	1	3	7	13	8	16	11						
6	25	62	8	6	0	0	0	1	0	1	17	6	23	7	40	9						
7	2	62	8	8	-	-	-	-	-	-	17	7	19	8	36	11						
7	10	62	8	8	-	-	-	-	-	-	10	6	15	10	25	12						
7	16	62	8	8	-	-	-	-	-	-	11	6	10	6	21	8						
7	23	62	8	15	0	0	0	0	0	0	3	6	12	7	15	9						
7	30	62	8	17	-	-	-	-	-	-	5	5	12	6	17	7						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	TEXAS
MAJOR BASIN	WESTERN GULF
MINOR BASIN	SABINE RIVER
STATION LOCATION	SABINE RIVER NEAR RULIFF, TEXAS

73

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
NO.	DAY	YR.	NO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	NO.	DAY	µµc/g	±	µµc/g	±
8	6	62	8	28	-	-	-	-	-	-	8	6	14	6	22	8						
8	13	62	8	30	-	-	-	-	-	-	8	6	8	7	16	9						
8	20	62	9	12	-	-	-	-	-	-	10	7	16	8	26	11						
8	27	62	9	12	0	1	1	1	1	1	2	5	17	7	19	8						
9	4	62	10	2	-	-	-	-	-	-	57	31	7	6	64	32						
9	10	62	10	9	-	-	-	-	-	-	14	6	17	7	31	9						
9	17	62	10	15	-	-	-	-	-	-	11	6	12	7	23	9						
9	24	62	10	17	0	1	1	1	1	1	7	5	13	7	20	9						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN SABINE RIVER
STATION LOCATION SABINE RIVER NEAR
RULIFF, TEXAS 73

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	300	0	0	0	0	100	0	120	60	0	0																				
10	16	61	500	0	0	190	0	80	0	150	80	40	20																				
11	6	61	200	0	0	60	0	20	0	80	20	60	0																				
11	20	61	100	0	0	0	0	0	0	70	0	20	0																				
12	4	61	200	0	0	0	0	40	0	120	60	0	40																				
12	18	61	100	0	0	0	0	0	0	60	40	20	80																				
1	2	62	00	0	0	0	0	0	0	0	20	0	0																				
1	15	62	00	0	0	20	0	0	20	0	0	0	20																				
2	5	62	100	0	0	0	0	60	0	60	20	20	20																				
2	19	62	200	0	0	20	0	70	0	110	20	70	20																				
3	5	62	100	0	0	0	0	40	100	0	0	20	0																				
3	19	62	00	0	0	0	0	0	0	20	20	0	0																				
4	2	62	800	70	0	90	0	340	0	140	180	20	50	57	1	51	1																
4	16	62	6100	20	130	860	*	40	190	1270	530	490	610	50	5	69	4	68	3	30	2	70	2	92	1	65	1						
5	7	62	1200	0	20	60	210	40	40	410	440	20	20	50	2	92	1	68	1														
5	21	62	1200	0	0	350	0	170	20	410	270	40	40	68	2																		
6	4	62	1400	0	0	40	0	0	0	800	590	890	590	69	2	88	1	77	1														
6	18	62	200	0	0	40	0	20	0	20	80	20	20																				
7	2	62	12000	10190	0	130	0	0	40	1180	460	460	550	2	7	69	3	68	2	71	1	88	1										
7	16	62	8200	8200	0	0	0	0	0	0	0	0	0	4	6																		
8	6	62	4700	830	40	830	0	80	20	1740	1120	460	210	68	4	88	3	3	3	40	1	38	1	2	1	77	1						
9	4	62	2600	130	0	340	0	40	0	1480	630	380	460	69	3	68	2	86	2														
9	10	62	11600	70	0	110	0	0	0	11140	270	1960	50	69	7																		
9	17	62	1600	0	0	170	0	20	20	1330	90	830	160	68	3	69	1	26	1														
*4	16	62					3080																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN SABINE RIVER
STATION LOCATION SABINE RIVER NEAR
RULIFF, TEXAS 073

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61										54370	0	0											0							0	0
10	16	61	26	47	68	5	23	5	57	5	38	0	0	2											0							0	0
11	6	61										0	0	5											1							0	1
11	20	61										0	0	4											0							0	0
12	4	61	26	31	57	8	28	4	65	3	54	20	0	0											0							0	0
12	18	61										0	0	15	11	2									56	51	4	76	4			1	0
1	2	62										0	0	1											0							0	0
1	15	62										0	0	2											0							0	0
2	5	62										150	0	0											0							0	0
2	19	62	57	18	26	12	92	11	82	8	51	0	0	0											0							0	0
3	5	62	92	20	89	9	57	8	14	5	58	40	0	1											0							0	30
3	19	62										0	0	8											0							0	0
4	2	62	82	19	57	15	92	13	26	5	48	0	0	8											1							0	0
4	16	62	92	38	74	11	71	10	57	5	36	0	0	25	21	2	11	1							0							1	0
5	7	62	92	13	65	6	71	6	26	5	70	0	20	40	11	3									5							0	4
5	21	62	28	30	57	25	26	19	23	5	21	40	10	9	11	1									19	73	2	74	2	50	1	0	0
6	4	62	57	55	82	14	68	6	26	4	21	0	0	1											0							0	0
6	18	62	57	13	92	11	26	9	64	9	58	0	0	1											0							0	0
7	2	62	68	13	57	11	92	8	71	7	61	60	0	0											0							0	0
7	16	62										0	0	0											0							0	0
8	6	62	26	77	68	4	58	3	71	3	13	0	0	13	22	1									0							0	0
9	4	62	58	81	53	7	26	4	71	2	6	0	0	3											0							0	0
9	10	62	58	95	56	3	26	1	71	1		0	0	312	18	5	22	5	7	4	9	3	15	2	9	76	2					0	0
9	17	62	26	67	58	15	57	5	82	5	8	0	0	2											0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TEXAS
MAJOR BASIN WESTERN GULF
MINOR BASIN SABINE RIVER
STATION LOCATION SABINE RIVER NEAR
RULIFF, TEXAS

73

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	-	-	7.1	-	-	-	-	-	-	-	-	50	-	-	.1	-	-
10	9	61	-	-	7.3	-	-	-	-	-	34	26	-	35	-	-	-	-	-
10	16	61	-	-	7.2	-	-	-	-	-	-	-	56	20	-	24	.1	-	-
11	6	61	-	-	-	-	-	-	-	-	40	26	40	15	0	13	-	-	-
11	13	61	-	-	7.4	-	-	-	-	-	44	48	28	-	-	10	-	-	-
11	14	61	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-
11	22	61	-	-	-	-	-	-	-	-	27	10	24	70	-	19	-	-	-
11	27	61	-	-	-	-	-	-	-	-	24	18	28	40	-	13	.0	-	-
12	4	61	-	-	-	-	-	-	-	-	-	-	-	30	-	13	.1	76	-
12	11	61	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-	139	-
12	18	61	-	-	-	-	-	-	-	-	16	10	32	-	-	-	-	-	-
12	26	61	-	-	-	-	40	-	-	-	-	-	-	-	-	-	-	-	-
1	3	62	-	-	7.1	-	-	-	-	-	16	-	40	80	-	-	-	-	-
1	8	62	-	-	-	-	-	-	-	-	-	-	28	-	-	16	-	-	-
1	15	62	-	-	-	-	-	-	-	-	28	-	40	-	-	24	-	-	-
1	22	62	-	-	-	-	-	-	-	-	28	-	42	-	97	26	-	-	-
1	29	62	-	-	-	-	-	-	-	-	23	-	18	30	170	22	-	-	-
2	5	62	-	-	-	-	-	-	-	-	27	-	-	-	-	22	-	-	-
2	13	62	-	-	-	-	25	-	-	-	-	-	-	-	-	-	-	-	-
4	2	62	-	-	-	-	-	-	-	-	38	-	44	25	-	27	-	-	-
4	9	62	-	-	7.5	-	-	-	-	-	47	26	68	-	-	40	.1	-	-
4	16	62	-	-	-	-	-	-	-	-	46	28	40	25	-	31	.3	-	-
4	23	62	-	-	-	-	-	-	-	-	35	24	44	20	65	24	.0	-	-
4	30	62	-	-	-	-	-	-	-	-	33	28	-	25	125	-	-	-	-
5	7	62	-	-	7.3	-	-	-	-	-	14	16	40	35	62	15	.0	-	-
5	28	62	-	-	-	-	-	-	-	-	34	32	48	25	25	19	-	-	-
6	4	62	-	-	-	-	-	-	-	-	36	32	48	30	-	26	-	-	-
6	11	62	-	-	-	-	-	-	-	-	23	-	-	-	-	15	-	115	-
7	2	62	-	-	7.9	-	-	-	-	-	27	28	48	10	130	13	.0	-	-
7	10	62	-	-	-	-	-	-	-	-	51	-	60	15	83	20	.0	-	-
7	16	62	-	-	-	-	-	-	-	-	34	34	56	25	*25	-	-	-	-
7	23	62	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-
8	13	62	-	-	-	-	-	-	-	-	49	32	40	15	-	13	.0	157	-
9	4	62	-	-	-	-	-	-	-	-	61	28	40	10	57	17	.1	149	-
9	17	62	-	-	-	-	-	-	-	-	48	32	36	20	57	14	.0	140	-
9	24	62	-	-	7.2	-	-	-	-	-	56	30	52	15	0	20	-	168	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Ruliff, Texas
Operated by U.S. Geological Survey

STATE	Texas
MAJOR BASIN	Western Gulf
MINOR BASIN	Sabine River
STATION LOCATION	Sabine River near Ruliff, Texas

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	2.840	1.440	9.600	25.600	16.300	9.040	5.200	9.950	2.420	2.600	1.600	1.560
2	2.660	1.480	9.600	23.500	15.900	9.040	4.900	11.400	2.600	2.720	1.560	1.600
3	2.480	1.680	9.600	21.400	15.500	9.300	4.800	12.300	3.100	3.170	1.520	1.480
4	2.660	1.760	9.300	19.500	15.200	9.950	4.600	13.900	3.910	3.380	1.520	1.360
5	3.030	1.910	8.300	17.200	15.200	10.600	4.700	16.300	5.800	3.170	1.520	1.280
6	2.960	2.060	7.100	15.200	15.200	11.000	5.000	19.000	7.880	2.900	1.520	1.240
7	2.840	2.010	6.240	14.200	15.200	11.400	5.100	20.100	9.040	2.720	1.600	1.280
8	2.840	2.010	5.800	13.900	15.500	11.800	5.000	20.100	9.040	2.600	1.600	1.480
9	2.960	2.060	5.940	13.300	15.500	11.400	4.700	19.500	8.300	2.540	1.560	1.720
10	3.170	1.960	6.560	12.300	15.500	10.600	4.420	18.500	6.400	2.480	1.640	1.960
11	3.100	1.810	7.880	11.000	15.200	9.950	4.240	18.000	5.200	2.420	1.760	2.060
12	2.900	1.760	9.950	9.950	14.200	9.300	4.510	17.200	4.600	2.360	1.860	2.060
13	2.660	2.330	11.800	9.300	12.800	9.040	5.100	16.700	4.600	2.310	1.860	2.110
14	2.480	4.580	14.800	8.780	10.600	9.300	5.800	15.900	5.100	2.210	1.760	2.010
15	2.310	7.020	18.500	8.300	8.780	9.950	6.920	14.800	5.940	2.110	1.680	1.910
16	2.160	9.300	22.800	8.300	7.680	10.600	7.880	13.300	6.400	1.960	1.520	1.810
17	2.060	10.300	27.700	8.780	7.280	11.000	8.780	11.400	6.080	1.810	1.360	1.810
18	1.910	10.300	32.000	9.300	7.680	11.400	9.040	9.950	5.000	1.680	1.240	1.860
19	1.810	9.300	34.200	10.600	7.680	11.400	9.040	8.780	4.150	1.600	1.160	1.960
20	1.760	7.680	37.200	11.400	7.100	11.000	8.520	8.080	4.330	1.520	1.040	2.010
21	1.680	5.940	38.000	12.300	6.920	10.300	7.280	6.920	5.000	1.480	1.010	2.110
22	1.640	4.800	36.500	13.600	6.560	9.300	5.940	5.540	5.660	1.480	.975	2.210
23	1.600	4.600	34.200	14.200	6.740	8.780	4.800	4.420	5.540	1.520	.940	2.260
24	1.600	5.800	33.500	14.800	7.480	8.080	4.150	3.670	4.700	1.560	.905	2.260
25	1.560	7.880	32.000	14.800	8.080	7.680	3.830	3.240	3.670	1.640	.905	2.260
26	1.520	8.780	31.200	15.200	8.780	7.480	3.910	2.900	3.030	1.600	.870	2.210
27	1.480	9.300	30.500	15.500	9.040	7.280	4.420	2.720	2.720	1.520	.888	2.160
28	1.440	9.300	29.800	15.900	9.040	7.100	5.660	2.540	2.420	1.440	.905	2.010
29	1.440	9.300	29.100	17.200		6.560	7.280	2.420	2.260	1.440	1.040	1.860
30	1.440	9.300	28.400	17.600		6.080	8.520	2.420	2.360	1.560	1.120	1.720
31	1.440		27.000	17.200		5.540		2.420		1.600	1.280	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE CALIFORNIA
MAJOR BASIN CALIFORNIA
MINOR BASIN SACRAMENTO RIVER
STATION LOCATION SACRAMENTO RIVER AT
GREENS LANDING ABOVE
COURTLAND, CALIFORNIA 116

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
7	13	62	4300	0	0	300	460	170	130	2030	1220	340	1350	68	4	71	2	50	2	92	1	24	1	51	1	69	1						
8	20	62	2700	0	60	80	340	150	0	840	1270	420	840	92	2	71	2	50	2	68	2	88	1	69	1								
9	4	62	200	0	0	30	0	40	0	80	10	100	370																				
9	14	62	300	0	0	90	0	20	0	140	30	110	230																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE CALIFORNIA
MAJOR BASIN CALIFORNIA
MINOR BASIN SACRAMENTO RIVER
STATION LOCATION SACRAMENTO RIVER AT
GREENS LANDING ABOVE
COURTLAND, CALIFORNIA 116

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
7	13	62	92	18	56	11	57	7	26	6	58	0	0	23	2	1	15	1							3	76	1					0	0
8	20	62	56	40	92	14	47	6	82	4	36	40	0	39	22	2	20	2	11	1					1							0	0
9	4	62	82	16	56	14	2	7	47	7	56	0	0	20	17	1	11	1							6	50	2					2	0
9	14	62	56	43	95	8	82	8	47	3	38	0	0	2											0							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE CALIFORNIA
MAJOR BASIN CALIFORNIA
MINOR BASIN SACRAMENTO RIVER
STATION LOCATION SACRAMENTO RIVER AT
GREENS LANDING ABOVE
COURTLAND, CALIFORNIA 116

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
5	31	62	7	5	0	1	1	1	1	1	3	6	4	7	7	9						
6	7	62	7	5	1	1	0	1	1	1	16	6	0	5	16	7						
6	14	62	7	16	0	1	0	1	0	1	4	5	7	6	11	7						
6	20	62	8	3	0	0	0	1	0	1	9	5	14	6	23	7						
6	29	62	8	1	0	0	0	0	0	0	3	6	4	6	7	8						
7	5	62	8	6	0	1	0	0	0	1	2	6	9	7	11	9						
8	9	62	8	23	0	1	0	0	0	1	1	6	8	6	9	8						
8	20	62	9	11	0	0	0	1	0	1	6	6	9	7	15	9						
9	4	62	9	20	0	0	0	1	0	1	2	5	4	6	6	8						
9	13	62	10	10	0	0	0	1	0	1	4	5	6	6	10	7						
9	19	62	10	17	0	1	0	0	0	1	3	5	3	5	6	7						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE CALIFORNIA
MAJOR BASIN CALIFORNIA
MINOR BASIN SACRAMENTO RIVER
STATION LOCATION SACRAMENTO RIVER AT
GREENS LANDING ABOVE
COURTLAND, CALIFORNIA 116

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
4	24	62	5	7	7831#	90	38	52	1	10	12	1	1	8	2	4	2	1	8
5	23	62	6	8	5407	152	56	96	1	15	17	2	1	13	1	7	5	1	10
7	6	62	7	20	9032	87	40	47	1	11	13	2	1	9	1	5	3	1	6
8	9	62	8	30	3209	199	53	146	1	13	21	3	2	16	0	6	3	1	8
9	5	62	10	9	8880	85	36	49	1	8	13	2	1	10	0	4	3	1	6

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE CALIFORNIA
MAJOR BASIN CALIFORNIA
MINOR BASIN SACRAMENTO RIVER
STATION LOCATION SACRAMENTO RIVER AT
GREENS LANDING ABOVE
COURTLAND, CALIFORNIA 116

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14000
7	20	62	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-
9	14	62	20.0	6.4	7.3	1.9	-	-	-	-	-	-	-	-	-	-	-	-	7500
9	19	62	-	-	7.6	-	-	-	-	-	10	74	64	5	*25	13	.0	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Sacramento, California
Operated by U.S. Geological Survey

STATE	California
MAJOR BASIN	California
MINOR BASIN	Sacramento River
STATION LOCATION	Sacramento River at Greens Landing above Courtland, Calif.

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	7.930	7.360	13.500	10.200	9.250	35.100	27.700	22.000	17.400	9.840	10.500	11.700
2	7.540	7.400	19.000	9.910	9.380	35.100	28.100	20.600	16.700	10.400	10.600	11.700
3	7.180	7.400	28.500	8.940	9.380	40.100	28.800	19.800	16.600	10.300	10.700	12.000
4	6.960	7.450	32.300	9.030	9.470	41.000	29.200	20.300	16.200	10.100	10.700	12.300
5	6.740	7.580	30.900	8.810	9.250	39.800	29.900	21.300	15.400	10.300	11.100	12.600
6	7.010	7.360	27.200	9.080	8.940	40.000	30.700	22.300	13.800	10.200	11.300	13.100
7	7.100	7.100	23.900	9.160	9.870	47.700	31.600	23.100	12.600	10.000	11.000	13.600
8	6.700	7.100	18.300	9.210	10.400	54.400	32.200	23.300	12.400	9.810	11.200	13.500
9	6.660	7.010	15.900	9.300	16.700	57.900	32.800	23.400	12.500	9.890	11.300	13.900
10	7.050	7.230	14.400	9.470	38.200	59.700	33.500	23.900	12.400	9.980	11.700	13.600
11	6.790	7.230	13.200	9.160	60.400	58.900	33.300	24.300	12.800	10.200	12.100	13.000
12	6.660	7.010	12.000	9.160	63.300	56.100	32.600	23.200	13.100	10.300	12.400	12.800
13	6.790	7.050	11.500	9.250	62.200	51.700	30.900	22.000	13.000	10.200	12.200	12.600
14	7.010	7.270	10.700	8.810	64.000	46.400	30.400	21.500	12.900	10.300	12.100	13.000
15	7.050	7.400	10.500	8.420	68.200	41.400	30.800	20.600	12.700	10.400	12.000	13.000
16	6.960	7.450	10.300	8.420	70.100	38.000	32.000	19.700	13.800	10.300	11.700	12.800
17	6.880	7.540	10.300	8.200	70.000	35.200	31.800	19.700	14.000	10.300	11.700	12.300
18	6.920	7.450	10.100	8.110	68.700	33.000	30.000	19.900	14.000	10.600	11.300	12.100
19	7.360	7.540	9.980	7.930	66.500	31.300	27.800	19.100	13.800	10.400	11.500	11.800
20	7.100	7.450	10.000	9.790	64.700	29.700	26.300	18.600	13.200	10.100	11.700	12.000
21	7.050	7.930	11.200	18.000	63.200	28.500	25.000	17.800	12.800	10.100	11.800	11.600
22	7.010	7.930	19.300	21.500	61.400	27.700	23.100	16.800	12.700	10.300	11.800	11.300
23	7.180	8.060	21.700	18.600	58.900	29.300	22.300	16.300	12.500	10.500	11.600	11.300
24	6.960	8.460	18.500	15.100	55.600	28.900	22.500	16.900	11.300	10.300	11.200	11.300
25	6.960	8.420	15.600	12.400	51.100	28.000	23.200	17.000	10.300	10.400	11.300	11.300
26	7.100	9.270	13.300	11.600	46.700	26.400	23.400	16.400	9.860	10.500	11.700	11.200
27	7.320	11.600	11.900	10.900	41.200	25.500	23.100	16.100	10.300	10.200	11.800	10.700
28	7.540	13.700	11.300	10.200	37.000	25.600	22.700	15.800	10.900	10.200	11.800	10.400
29	7.360	13.100	10.500	9.210		26.000	25.600	15.900	10.500	10.300	12.000	10.400
30	7.270	12.600	10.500	9.080		26.400	25.900	17.200	9.870	10.500	12.000	10.500
31	7.490		10.200	9.600		26.700		17.400		10.400	12.000	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN ST. LAWRENCE RIVER
STATION LOCATION ST. LAWRENCE RIVER AT
MASSENA, NEW YORK 63

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
NO.	DAY	YR.	NO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	NO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	16	-	-	-	-	-	-	3	5	6	7	9	8						
10	9	61	10	27	-	-	-	-	-	-	4	5	5	7	9	9						
10	16	61	11	1	-	-	-	-	-	-	1	5	7	7	8	8						
10	23	61	11	2	-	-	-	-	-	-	2	5	3	7	5	8						
10	30	61	11	6	-	-	-	-	-	-	6	5	17	7	23	8						
10	31	61	11	16	-	-	-	-	-	-	8	6	4	6	12	8						
11	6	61	11	17	-	-	-	-	-	-	10	5	34	7	44	9						
11	13	61	11	28	-	-	-	-	-	-	7	6	22	7	29	9						
11	20	61	11	30	0	1	0	1	0	1	3	4	10	5	13	6						
11	27	61	12	11	-	-	-	-	-	-	5	5	17	7	22	9						
12	4	61	12	12	-	-	-	-	-	-	6	5	19	7	25	9						
12	11	61	12	19	-	-	-	-	-	-	9	4	20	6	29	7						
12	18	61	1	2	0	1	0	1	0	1	7	4	15	5	22	6						
12	26	61	1	10	-	-	-	-	-	-	0	5	9	7	9	9						
1	3	62	1	17	-	-	-	-	-	-	9	5	12	7	21	9						
1	8	62	1	18	-	-	-	-	-	-	7	5	12	7	19	9						
1	15	62	1	24	-	-	-	-	-	-	19	4	15	5	34	7						
1	22	62	1	31	-	-	-	-	-	-	9	6	21	7	30	9						
1	29	62	2	12	-	-	-	-	-	-	5	5	10	7	15	9						
2	12	62	2	28	-	-	-	-	-	-	6	5	17	7	23	9						
2	19	62	3	2	0	1	0	1	0	1	5	4	9	5	14	6						
2	26	62	3	12	-	-	-	-	-	-	0	5	2	7	2	9						
3	5	62	3	14	-	-	-	-	-	-	7	4	15	5	22	6						
3	12	62	3	23	-	-	-	-	-	-	11	4	15	5	26	6						
3	19	62	3	30	0	0	0	1	0	1	11	4	16	5	27	6						
3	26	62	4	5	-	-	-	-	-	-	13	5	25	7	38	9						
4	2	62	4	13	-	-	-	-	-	-	17	6	25	7	42	9						
4	9	62	4	24	-	-	-	-	-	-	22	6	22	7	44	9						
4	16	62	4	30	1	1	0	1	1	1	8	4	14	5	22	6						
4	23	62	5	23	-	-	-	-	-	-	35	12	20	9	55	15						
4	30	62	6	25	-	-	-	-	-	-	24	5	19	6	43	7						
5	7	62	6	18	-	-	-	-	-	-	1	7	0	7	1	10						
5	14	62	6	22	-	-	-	-	-	-	8	7	0	6	8	8						
5	21	62	6	26	0	1	2	1	2	1	6	5	11	7	17	9						
5	28	62	7	2	-	-	-	-	-	-	8	5	10	7	18	9						
6	4	62	7	5	-	-	-	-	-	-	1	5	9	8	10	9						
6	11	62	7	13	-	-	-	-	-	-	3	3	13	5	16	6						
6	18	62	8	6	1	1	0	1	1	1	15	9	0	32	15	33						
6	25	62	7	19	-	-	-	-	-	-	2	5	14	7	16	9						
7	3	62	8	1	-	-	-	-	-	-	0	8	9	7	9	11						
7	9	62	10	6	-	-	-	-	-	-	3	5	12	7	15	9						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEW YORK

MAJOR BASIN NORTHEAST

MINOR BASIN ST. LAWRENCE RIVER

STATION LOCATION ST. LAWRENCE RIVER AT

MASSENA, NEW YORK 63

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	16	62	8	9	0	0	0	1	0	1	4	5	34	7	38	8						
7	23	62	8	20	-	-	-	-	-	-	3	5	16	7	19	8						
7	30	62	8	21	-	-	-	-	-	-	2	5	9	6	11	7						
8	6	62	8	23	-	-	-	-	-	-	2	5	10	7	12	9						
8	13	62	8	29	-	-	-	-	-	-	6	6	7	7	13	9						
8	20	62	9	6	0	0	0	1	0	1	8	6	4	8	12	10						
8	27	62	9	18	-	-	-	-	-	-	5	6	14	10	19	12						
9	4	62	10	6	-	-	-	-	-	-	4	5	10	7	14	9						
9	10	62	10	11	-	-	-	-	-	-	2	5	8	7	10	9						
9	17	62	10	8	1	1	1	1	2	1	5	5	13	7	18	9						
9	24	62	12	14	-	-	-	-	-	-	0	7	10	8	10	11						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW YORK

MAJOR BASIN NORTHEAST

MINOR BASIN ST. LAWRENCE RIVER

STATION LOCATION ST. LAWRENCE RIVER AT
MASSENA, NEW YORK

63

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	600	0	0	40	0	80	20	230	210	40	210																				
10	16	61	200	0	0	40	0	20	0	170	0	0	60																				
11	6	61	1000	0	20	120	0	80	20	480	230	40	120	71	2																		
11	20	61	300	0	0	20	0	20	60	150	80	20	80																				
12	4	61	00	0	0	20	0	0	0	20	0	0	0																				
12	18	61	2500	70	20	50	20	250	180	320	1580	0	20	77	3	99	1	71	1	51	1	60	1										
1	3	62	400	0	20	40	0	0	0	100	190	20	40																				
1	15	62	500	0	0	40	0	0	20	100	370	60	40	77	1																		
2	12	62	1300	0	80	100	0	0	0	680	380	0	20	71	3	77	1																
2	19	62	2500	350	40	330	0	0	40	1140	620	150	20	71	3	3	2	82	1	25	1	69	1	77	1								
3	5	62	500	0	40	20	0	0	0	210	190	0	80	71	1																		
3	19	62	2600	0	20	170	0	40	20	1720	660	120	80	71	4	77	1	82	1														
4	2	62	2300	0	40	190	0	40	20	1300	700	500	190	71	4	82	1																
4	16	62	800	0	20	70	0	20	20	160	500	200	270	77	1																		
5	7	62	1100	0	60	110	20	60	60	460	360	230	190	71	2																		
5	21	62	1700	0	130	170	130	460	60	400	380	300	550	57	2	71	2	84	1														
6	4	62	600	0	0	210	0	0	0	250	130	40	110	71	1																		
6	18	62	1800	20	60	60	20	290	250	230	850	80	290	51	1	60	1	79	1														
7	3	62	300	0	0	40	0	0	40	130	40	40	40																				
7	16	62	200	0	0	20	0	60	40	40	40	40	20																				
8	6	62	400	0	0	0	0	40	230	40	120	0	0																				
8	20	62	300	0	0	40	0	0	0	0	210	0	210																				
9	4	62	900	0	0	0	0	0	0	210	680	170	210	88	2																		
9	17	62	300	0	40	60	0	0	0	40	170	0	0																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN ST. LAWRENCE RIVER
STATION LOCATION ST. LAWRENCE RIVER AT
MASSENA, NEW YORK 063

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA								
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
10	2	61	82	19	16	15	45	10	80	6	50	0	0	7	11	1									1							0	0
10	16	61	47	12	59	11	82	11	16	10	56	0	0	2											2							0	0
11	6	61	80	12	45	11	95	10	16	10	57	0	0	9	11	1									13	51	3					1	0
11	20	61	45	16	16	12	95	12	9	9	51	0	0	17	11	2	17	1							0							0	0
12	4	61	9	15	45	12	95	12	47	11	50	0	0	27	11	3									0							0	0
12	18	61	95	16	16	14	80	11	9	9	50	110	0	2											0							0	0
1	3	62	9	32	59	29	47	7	95	7	25	0	0	10											2							0	0
1	15	62	9	27	59	19	95	9	47	6	39	0	0	0											0							0	0
2	12	62	59	31	95	15	35	15	47	14	25	40	0	6											1							0	0
2	19	62	59	21	95	15	47	13	82	9	42	310	10	1											0							0	0
3	5	62	82	23	95	15	9	14	59	12	36	20	0	0											0							0	0
3	19	62	82	34	9	19	95	15	47	7	25	40	0	3											1							0	0
4	2	62	82	14	9	12	47	11	35	24	39	40	0	5											2							2	0
4	16	62	82	26	9	25	95	7	47	6	36	0	0	5											0							0	0
5	7	62	47	35	82	30	95	13	9	6	16	0	0	18	14	2	21	1							0							0	0
5	21	62	47	55	95	11	82	10	80	6	18	40	0	79	17	3	21	3	14	2	11	2			2							1	0
6	4	62	95	20	47	16	59	15	82	14	35	0	0	84	11	3	17	2	21	2	10	1	46	1	8	50	2					0	1
6	18	62	47	15	15	11	95	8	45	7	59	0	0	95	11	3	21	3	17	1	46	1			18	51	2	76	2	50	1	5	1
7	3	62	80	18	95	14	16	9	45	5	54	0	0	125	17	4	11	3	46	1					24	51	3	76	2	50	1	0	0
7	16	62	47	14	95	10	80	8	45	8	60	0	0	89	17	4	11	2							25	51	3	50	1	76	1	0	0
8	6	62	47	22	16	19	76	10	80	5	44	0	0	111	11	3	17	3	6	2	21	2			21	76	2	51	2	59	1	20	0
8	20	62	16	21	76	21	27	9	95	5	44	0	0	258	17	5	4	5	11	3	21	1			15	50	2	51	2	77	1	45	0
9	4	62	70	47	47	8	26	5	45	5	35	0	0	170	17	5	11	2	5	1	22	1	21	1	0							33	0
9	17	62	16	22	2	21	82	5	95	5	47	0	0	14	17	1									6	51	2					0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN ST. LAWRENCE RIVER
STATION LOCATION ST. LAWRENCE RIVER AT
MASSENA, NEW YORK 63

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES					CHLOROFORM EXTRACTABLES								
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	31	61	11	14	5064	154	50	104	1	14	16	1	2	11	2	5	4	1	9
12	14	61	12	30	5260	116	35	81	0	11	12	1	2	8	1	4	1	1	6
1	23	62	3	13	4884	188	50	138	2	9	23	2	4	15	2	7	3	1	5
4	4	62	4	25	5078	195	72	123	2	17	22	2	4	15	1	10	7	1	13
5	16	62	7	13	5879	130	51	79	1	11	18	1	3	13	1	7	4	0	10
8	7	62	9	14	5664	143	40	103	1	9	17	1	3	11	2	5	3	1	4

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW YORK

MAJOR BASIN NORTHEAST

MINOR BASIN ST. LAWRENCE RIVER

STATION LOCATION ST. LAWRENCE RIVER AT

MASSENA, NEW YORK 63

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	19.4	-	8.1	-	-	-	-	-	30	85	120	0	96	-	-	201	140
10	9	61	16.7	-	8.1	-	-	-	-	-	30	86	123	0	15	-	-	203	140
10	10	61	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-
10	16	61	15.0	-	8.0	-	-	-	-	-	24	84	128	5	15	-	-	229	110
10	23	61	13.9	-	7.9	-	-	-	-	-	24	86	129	5	15	-	-	201	*5
10	30	61	13.9	-	7.8	-	-	-	-	-	24	86	127	0	15	-	-	195	150
11	6	61	12.2	-	7.9	-	-	-	-	-	19	87	123	0	15	28	.1	177	600
11	13	61	11.7	-	7.8	-	-	-	-	-	28	88	124	0	15	28	.0	186	140
11	14	61	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
11	20	61	6.7	-	7.7	-	-	-	-	-	28	84	128	0	10	16	.0	180	180
11	27	61	7.2	-	8.0	-	-	-	-	-	30	86	123	0	10	-	-	188	45
12	4	61	6.7	-	8.1	-	-	-	-	-	28	84	121	0	15	-	-	178	120
12	11	61	3.9	-	8.2	-	-	-	-	-	34	84	121	0	15	-	-	167	-
12	14	61	-	-	-	-	-	-	-	-	-	-	-	-	-	27	.0	-	-
12	18	61	3.3	-	8.2	-	-	-	-	-	27	87	123	0	25	30	.0	192	-
12	26	61	1.7	-	8.2	-	-	-	-	-	24	86	124	0	15	-	-	180	-
12	30	61	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
1	3	62	-	-	8.2	-	-	-	-	-	24	91	128	0	20	-	-	193	-
1	8	62	.6	-	8.1	-	-	-	-	-	24	89	125	0	15	30	-	179	-
1	15	62	.8	-	7.8	-	-	-	-	-	26	91	129	0	25	-	-	201	-
1	22	62	.6	-	7.6	-	-	-	-	-	28	84	122	0	15	27	.1	194	-
1	26	62	.0	-	8.1	-	-	-	-	-	21	95	130	0	5	-	-	203	-
1	29	62	-	-	7.7	-	-	-	-	-	32	89	129	0	15	27	.0	182	-
2	12	62	.3	-	8.0	-	-	-	-	-	28	92	130	0	15	-	-	190	-
2	19	62	.0	-	8.2	-	-	-	-	-	30	91	130	0	15	34	-	190	-
2	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*5
3	5	62	.0	-	8.0	-	-	-	-	-	24	92	126	2	5	-	-	191	*5
3	12	62	-	-	7.8	-	-	-	-	-	26	91	131	1	10	-	-	189	*5
3	13	62	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-
3	19	62	.6	-	7.8	-	-	-	-	-	21	89	127	3	3	-	-	200	*5
3	26	62	1.1	-	7.8	-	-	-	-	-	28	82	121	1	15	-	-	183	*5
4	2	62	1.7	-	7.5	-	-	-	-	-	24	70	104	3	2	33	-	165	*5
4	9	62	6.7	-	7.7	-	-	-	-	.2	26	68	100	3	10	33	.0	151	5
4	16	62	2.2	-	8.1	-	-	-	-	-	26	79	107	-	20	28	.1	160	-
4	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*5
4	23	62	3.3	-	8.2	-	-	-	-	-	26	87	117	-	119	-	-	201	-
4	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90
4	25	62	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
4	30	62	6.1	-	7.9	-	-	-	-	-	17	86	120	-	-	30	.0	156	250

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW YORK
MAJOR BASIN NORTHEAST
MINOR BASIN ST. LAWRENCE RIVER
STATION LOCATION ST. LAWRENCE RIVER AT
MASSENA, NEW YORK 63

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
5	7	62	6.7	-	-	-	-	-	-	-	26	89	120	5	1	33	.0	192	25
5	14	62	8.8	-	8.0	-	-	-	-	-	30	91	123	5	3	-	-	195	190
5	21	62	11.1	-	8.4	-	-	-	-	-	28	90	125	2	1	27	.0	181	350
5	28	62	12.2	-	8.2	-	-	-	-	-	26	88	118	5	1	27	.0	193	680
6	4	62	13.2	-	8.2	-	-	-	-	-	26	88	120	8	5	28	.0	184	7500
6	11	62	16.7	-	8.4	-	-	-	-	-	17	92	122	6	6	29	.0	191	150
6	18	62	15.6	-	8.4	-	-	-	-	-	21	92	123	6	15	-	-	206	95
6	25	62	16.7	-	8.4	-	-	-	-	-	21	93	125	8	1	-	-	193	45
7	3	62	19.4	-	8.1	-	-	-	-	-	26	92	124	5	1	-	-	197	90
7	9	62	21.1	-	8.5	-	-	-	-	-	26	92	125	6	1	30	.0	228	80
7	16	62	18.9	-	8.3	-	-	-	-	-	24	91	126	5	1	34	.0	199	950
7	23	62	20.0	-	8.3	-	-	-	-	-	28	92	124	5	1	29	-	193	50
7	30	62	20.0	-	8.2	-	-	-	-	-	25	86	123	7	1	31	.0	195	190
8	6	62	21.1	-	8.1	-	-	-	-	-	27	87	124	7	2	-	-	208	220
8	13	62	21.1	-	8.1	-	-	-	-	-	24	86	121	6	1	-	-	210	-
8	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*5
8	20	62	19.4	-	8.4	-	-	-	-	-	21	88	123	5	25	31	.0	195	90
8	27	62	20.6	-	8.2	-	-	-	-	-	19	89	123	6	1	28	.0	210	500
9	4	62	18.9	-	8.3	-	-	-	-	-	29	87	124	2	1	-	-	198	50
9	10	62	20.0	-	8.1	-	-	-	-	-	36	84	123	2	5	-	-	196	-
9	14	62	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-
9	17	62	18.8	-	8.2	-	-	-	-	-	33	89	125	5	7	37	.0	189	-
9	24	62	17.8	-	8.2	-	-	-	-	-	24	86	127	3	1	-	-	196	15

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at St. Lawrence River - International Rapids Section
(St. Lawrence Power Pool)
Supplied by U.S. Army Corps of Engineers

STATE New York
MAJOR BASIN Northeast
MINOR BASIN St. Lawrence River
STATION LOCATION St. Lawrence River at Massena, New York

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	236.000	216.000	213.000	200.000	214.000	211.000	178.000	194.000	188.000	214.000	216.000	217.000
2	236.000	216.000	213.000	214.000	214.000	211.000	192.000	194.000	210.000	214.000	215.000	217.000
3	236.000	216.000	213.000	214.000	197.000	194.000	192.000	194.000	210.000	214.000	215.000	217.000
4	236.000	220.000	213.000	214.000	197.000	194.000	193.000	194.000	210.000	214.000	214.000	217.000
5	236.000	219.000	213.000	214.000	211.000	208.000	193.000	204.000	210.000	214.000	214.000	217.000
6	237.000	220.000	213.000	204.000	211.000	208.000	192.000	204.000	210.000	214.000	214.000	217.000
7	235.000	220.000	213.000	200.000	211.000	208.000	178.000	204.000	210.000	213.000	214.000	218.000
8	234.000	220.000	213.000	213.000	211.000	208.000	178.000	204.000	210.000	213.000	214.000	216.000
9	235.000	220.000	204.000	213.000	211.000	208.000	192.000	204.000	212.000	213.000	214.000	216.000
10	235.000	220.000	204.000	213.000	197.000	194.000	192.000	204.000	212.000	213.000	214.000	216.000
11	235.000	216.000	218.000	208.000	197.000	194.000	192.000	204.000	212.000	213.000	216.000	216.000
12	235.000	216.000	218.000	201.000	212.000	208.000	192.000	203.000	212.000	213.000	216.000	216.000
13	235.000	216.000	218.000	200.000	212.000	208.000	192.000	203.000	212.000	213.000	216.000	215.000
14	233.000	216.000	218.000	210.000	212.000	208.000	188.000	203.000	212.000	214.000	216.000	216.000
15	232.000	216.000	218.000	216.000	212.000	208.000	188.000	203.000	212.000	214.000	216.000	214.000
16	234.000	216.000	204.000	214.000	212.000	208.000	188.000	203.000	214.000	214.000	216.000	214.000
17	233.000	216.000	204.000	214.000	197.000	194.000	188.000	203.000	214.000	214.000	216.000	214.000
18	233.000	213.000	218.000	214.000	197.000	194.000	188.000	203.000	214.000	214.000	217.000	214.000
19	233.000	213.000	218.000	214.000	211.000	208.000	188.000	188.000	214.000	214.000	217.000	214.000
20	233.000	213.000	218.000	202.000	211.000	208.000	188.000	188.000	214.000	214.000	217.000	214.000
21	228.000	213.000	218.000	202.000	211.000	208.000	193.000	188.000	214.000	212.000	217.000	214.000
22	227.000	213.000	218.000	216.000	211.000	208.000	193.000	188.000	214.000	212.000	217.000	214.000
23	228.000	213.000	220.000	216.000	211.000	208.000	193.000	188.000	214.000	212.000	217.000	214.000
24	228.000	213.000	206.000	216.000	197.000	194.000	193.000	188.000	214.000	212.000	217.000	214.000
25	228.000	213.000	206.000	216.000	197.000	194.000	193.000	188.000	214.000	212.000	216.000	215.000
26	228.000	212.000	220.000	216.000	211.000	208.000	193.000	188.000	214.000	212.000	216.000	214.000
27	228.000	214.000	220.000	200.000	211.000	208.000	193.000	188.000	214.000	212.000	216.000	213.000
28	216.000	213.000	220.000	200.000	211.000	208.000	194.000	188.000	214.000	215.000	216.000	214.000
29	216.000	213.000	220.000	214.000		208.000	194.000	188.000	214.000	215.000	216.000	211.000
30	216.000	213.000	214.000	214.000		208.000	194.000	188.000	214.000	215.000	216.000	211.000
31	217.000		200.000	214.000		178.000		188.000		215.000	216.000	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE CALIFORNIA
MAJOR BASIN CALIFORNIA
MINOR BASIN SAN JOAQUIN RIVER
STATION LOCATION SAN JOAQUIN RIVER NEAR
VERNALIS, CALIFORNIA 122

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
6	29	62	32900	2150	420	3840	*	800	130	9200	5490	3250	3000	50	7	67	6	68	4	69	4	88	4	87	3	92	3	2	3	9	3	51	3
7	6	62	29100	1060	130	2530	*	970	210	8480	4580	2620	2950	50	7	71	5	68	5	88	4	51	3	38	3	92	2	3	2	69	2	44	2
7	13	62	13100	270	100	2550	*	1990	60	5770	910	930	330	67	5	51	4	50	4	68	4	25	2	38	2	34	2	69	2	24	2	88	1
8	8	62	16900	2280	40	1590	560	2090	950	6380	2980	1450	830	68	5	67	5	3	4	51	4	38	3	63	3	87	3	50	2	88	2	97	2
8	22	62	10400	360	0	3040	0	0	0	4900	2070	1140	1310	68	5	67	4	69	3	44	3	24	2	97	2	34	2	31	2	9	2	87	2
8	29	62	11100	120	0	1010	*	290	230	6130	2240	660	120	68	5	51	5	67	4	50	3	87	2	88	2	24	2	84	1	38	1	97	1
9	12	62	19200	250	250	1280	*	2820	330	10600	2400	1080	410	68	6	51	4	67	4	50	4	88	1	63	1	25	1	38	1	34	1	24	1
*6	29	62					10880																										
*7	6	62					11100																										
*7	13	62					1430																										
*8	29	62					1030																										
*9	12	62					1240																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE CALIFORNIA

MAJOR BASIN CALIFORNIA

MINOR BASIN SAN JOAQUIN RIVER

STATION LOCATION SAN JOAQUIN RIVER NEAR

VERNALIS, CALIFORNIA 122

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
6	29	62	20	32	48	21	26	16	20	8	23	80	0	11	2	1									1							0	0
7	6	62	80	44	26	32	71	4	92	2	18	0	0	6	2	1									2							0	0
7	13	62	20	40	26	21	20	18	71	4	17	0	0	69	2	4									3							0	0
8	8	62	26	37	20	25	46	4	65	3	31	0	0	39	2	2	17	1	11	1					0							1	0
8	22	62	26	41	20	18	58	8	97	5	28	0	0	3											0							0	0
8	29	62	26	39	20	22	23	3	48	3	33	0	0	431	15	6	11	5	17	4	2	4	22	3	0							3	0
9	12	62	26	69	20	13	48	2	82	2	14	0	0	323	2	5	11	4	15	3	13	3	17	2	6	50	2					6	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE CALIFORNIA

MAJOR BASIN CALIFORNIA

MINOR BASIN SAN JOAQUIN RIVER

STATION LOCATION SAN JOAQUIN RIVER NEAR
VERNALIS, CALIFORNIA 122

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
6	29	62	8	6	1	1	5	5	6	5	38	12	23	14	61	18						
7	6	62	8	15	0	2	5	4	5	4	4	24	7	27	11	36						
7	18	62	8	2	0	1	3	3	3	3	11	22	35	26	46	34						
7	25	62	8	21	1	2	6	4	7	4	7	21	24	24	31	32						
8	1	62	8	17	0	2	14	6	14	6	3	26	23	23	26	35						
8	8	62	8	29	1	1	2	3	3	3	0	36	1	15	1	39						
8	15	62	10	13	0	2	3	4	3	4	6	12	25	16	31	20						
8	22	62	10	5	0	2	3	4	3	4	27	28	60	33	87	43						
8	29	62	9	20	0	1	7	4	7	4	6	13	17	17	23	21						
9	5	62	9	25	1	1	5	3	6	3	0	10	15	15	15	18						
9	19	62	11	27	0	1	4	3	4	3	11	12	21	16	32	20						
9	26	62	10	23	0	1	11	4	11	4	25	11	12	15	37	19						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE	CALIFORNIA
MAJOR BASIN	CALIFORNIA
MINOR BASIN	SAN JOAQUIN RIVER
STATION LOCATION	SAN JOAQUIN RIVER NEAR VERNALIS, CALIFORNIA 122

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
8	21	62	8	27	3678	183	49	134	1	13	18	2	1	14	1	6	3	1	7
8	29	62	9	11	4073	193	54	139	1	12	26	2	2	22	0	7	3	1	4

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE CALIFORNIA
MAJOR BASIN CALIFORNIA
MINOR BASIN SAN JOAQUIN RIVER
STATION LOCATION SAN JOAQUIN RIVER NEAR
VERNALIS, CALIFORNIA 122

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	29	62	23.3	8.8	7.4	3.0	14	1.8	5.8	.0	99	115	146	10	25	47	.2	346	-
7	13	62	23.9	8.9	7.6	4.4	15	3.5	8.9	.0	182	174	236	10	50	85	-	628	3100
7	18	62	27.2	10.9	8.0	5.5	18	5.0	8.8	.0	183	173	228	10	45	73	.1	598	-
7	25	62	23.9	8.5	7.8	6.0	20	2.9	5.9	.0	206	175	214	15	60	70	.8	630	-
8	1	62	23.3	8.5	7.8	5.1	19	3.6	9.9	.0	210	174	243	10	35	76	.3	676	-
8	8	62	23.3	8.6	8.1	4.8	17	4.5	7.7	.0	184	173	221	15	35	72	.0	616	-
8	15	62	23.9	6.9	7.4	3.0	17	3.6	9.8	.0	181	164	222	10	40	65	-	616	-
8	22	62	23.9	7.1	7.3	4.5	19	3.6	8.8	.0	182	172	229	10	40	72	.3	563	-
8	29	62	22.8	7.1	7.6	4.6	25	3.8	9.7	.0	182	176	214	10	45	69	.3	545	-
9	5	62	20.0	7.0	7.3	3.6	10	5.0	12.0	.2	169	163	201	10	40	70	.1	563	-
9	12	62	21.7	7.1	6.8	3.7	11	3.7	8.0	.0	159	170	202	10	10	65	-	478	*100
9	19	62	20.6	7.8	8.0	3.7	8	3.0	8.8	.0	170	172	200	10	10	66	.2	579	-
9	26	62	20.6	7.0	7.5	3.8	15	4.5	8.8	-	154	169	196	0	40	61	.0	512	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Vernalis, California
Operated by U.S. Geological Survey

STATE	California
MAJOR BASIN	California
MINOR BASIN	San Joaquin River
STATION LOCATION	San Joaquin River near Vernalis, California

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.335	.504	.714	.619	.808	6.390	3.540	2.000	1.440	1.600	.650	.792
2	.378	.510	.734	.616	.792	5.730	3.410	1.760	1.550	1.450	.642	.900
3	.324	.520	.759	.616	.780	5.160	3.120	1.690	3.570	1.280	.634	.990
4	.304	.514	.766	.612	.770	5.040	2.700	1.660	4.490	1.180	.642	.965
5	.300	.584	.800	.608	.756	5.020	2.380	1.700	5.060	1.070	.679	.890
6	.291	.636	.832	.612	.748	5.000	2.250	2.010	5.490	.984	.778	.920
7	.318	.633	.836	.619	.752	5.690	2.150	2.540	4.660	.953	.764	.950
8	.356	.616	.832	.626	.756	7.220	2.070	2.940	3.540	.935	.760	.995
9	.382	.633	.812	.633	.831	8.620	1.990	3.170	3.650	.917	.756	1.080
10	.386	.633	.800	.692	1.090	9.650	1.930	4.240	4.350	.904	.751	1.110
11	.382	.647	.792	.748	2.000	9.830	1.840	5.090	4.440	.890	.746	1.080
12	.382	.608	.766	.800	3.550	8.780	1.780	5.460	4.920	.878	.733	.995
13	.386	.570	.742	.820	4.670	7.890	1.760	5.130	5.300	.866	.746	.925
14	.386	.517	.728	.828	4.760	7.340	1.730	4.530	5.040	.854	.728	.885
15	.523	.517	.717	.820	5.780	6.980	1.510	4.050	4.530	.842	.582	.920
16	.475	.507	.703	.812	7.820	6.780	1.420	3.290	3.910	.830	.562	.930
17	.434	.507	.682	.800	10.200	6.620	1.280	2.560	3.400	.818	.598	.920
18	.393	.485	.668	.776	11.100	6.120	1.220	2.210	3.080	.806	.622	.895
19	.399	.494	.664	.770	11.600	5.820	1.570	1.970	2.410	.794	.618	.880
20	.414	.556	.668	.900	12.000	5.610	1.800	1.850	2.640	.746	.658	.905
21	.418	.594	.661	1.030	12.500	5.170	2.050	1.930	3.290	.710	.642	.980
22	.459	.616	.650	1.170	12.200	4.940	2.340	1.910	3.510	.726	.642	1.040
23	.478	.626	.650	1.260	11.400	4.870	2.280	2.000	3.530	.730	.614	1.060
24	.475	.630	.647	1.160	10.600	4.740	2.060	2.050	3.530	.627	.650	1.140
25	.466	.650	.647	.972	10.000	4.550	1.990	2.030	3.170	.599	.706	1.140
26	.450	.678	.640	.896	8.970	4.420	1.960	2.120	2.690	.574	.778	1.100
27	.453	.700	.633	.856	7.690	4.330	2.010	2.200	2.320	.557	.841	1.060
28	.469	.700	.630	.836	6.850	4.230	2.100	2.020	2.000	.566	.764	1.090
29	.494	.700	.630	.812		3.970	2.140	1.880	1.780	.614	.787	1.120
30	.498	.706	.626	.800		3.790	2.170	1.690	1.620	.630	.733	1.140
31	.494		.626	.812		3.610		1.570		.606	.706	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	NEW MEXICO
MAJOR BASIN	COLORADO RIVER
MINOR BASIN	SAN JUAN RIVER
STATION LOCATION	SAN JUAN RIVER AT SHIPROCK, NEW MEXICO

93

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMI-NATION		ALPHA						BETA						DATE OF DETERMI-NATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	14	7	5	6	3	13	6	15	11	16	11	31	16						
10	9	61	11	11	7	5	10	4	17	6	69	11	60	9	129	14						
10	16	61	11	11	9	8	6	3	15	9	35	16	17	11	52	19						
10	23	61	11	14	6	4	5	3	11	5	16	12	14	11	30	16						
10	30	61	11	7	4	3	10	4	14	5	58	16	77	15	135	22						
11	6	61	11	21	15	10	8	4	23	11	141	20	68	13	209	24						
11	13	61	11	28	1	2	18	6	19	6	17	13	51	16	68	21						
12	18	61	1	2	2	2	17	6	19	6	7	10	44	13	51	16						
12	26	61	1	10	0	2	9	5	9	5	3	16	33	20	36	26						
1	2	62	1	12	1	2	4	3	5	4	10	17	19	19	29	25						
1	10	62	1	22	0	2	7	4	7	4	28	17	41	20	69	26						
1	15	62	1	29	0	3	20	8	20	8	8	17	44	22	52	27						
1	22	62	2	6	0	1	4	4	4	4	3	14	36	20	39	24						
1	29	62	2	14	0	2	22	7	22	7	41	17	54	21	95	27						
2	5	62	2	16	1	2	14	6	15	6	20	10	26	13	46	16						
2	14	62	2	27	26	20	10	5	36	21	195	29	59	13	254	32						
2	20	62	3	8	50	26	8	4	58	26	314	37	38	12	352	39						
2	26	62	3	9	5	4	18	6	23	7	99	16	50	13	149	21						
3	5	62	3	15	1	2	12	6	13	6	10	13	23	16	33	21						
3	12	62	3	26	2	2	13	5	15	5	71	11	41	12	112	16						
3	19	62	4	5	14	8	13	5	27	9	52	16	39	12	91	20						
3	26	62	4	10	12	7	4	3	16	8	78	21	17	15	95	26						
4	2	62	4	18	6	4	3	2	9	4	73	15	48	11	121	19						
4	11	62	4	27	1	1	1	1	2	1	5	5	28	6	33	7						
4	16	62	5	1	26	18	3	1	29	18	240	41	25	6	265	41						
4	30	62	6	6	3	3	1	1	4	3	29	9	20	7	49	11						
5	7	62	6	15	7	3	1	1	8	3	72	12	17	7	89	14						
5	14	62	6	26	6	3	1	1	7	3	24	9	14	6	38	11						
5	21	62	7	2	10	4	1	1	11	4	37	10	16	7	53	12						
5	28	62	7	3	2	2	1	1	3	2	33	8	28	7	61	11						
6	4	62	7	6	33	15	1	1	34	15	77	45	9	7	86	45						
6	11	62	7	13	4	3	2	1	6	3	31	9	14	4	45	11						
6	18	62	7	23	1	1	1	1	2	1	5	5	9	6	14	7						
6	25	62	9	9	2	4	1	1	3	4	34	8	8	5	42	9						
7	2	62	8	6	13	4	1	1	14	4	46	12	12	9	58	15						
7	11	62	8	7	0	1	10	3	10	3	3	5	21	8	24	9						
7	16	62	8	9	0	0	6	3	6	3	21	11	24	14	45	18						
7	23	62	8	9	0	1	18	5	18	5	1	11	22	15	23	19						
7	30	62	9	19	0	1	10	4	10	4	0	13	43	16	43	21						
8	6	62	8	28	0	1	20	6	20	6	7	10	46	16	53	19						
8	13	62	8	3	0	1	7	4	7	4	0	41	30	17	30	44						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE NEW MEXICO
MAJOR BASIN COLORADO RIVER
MINOR BASIN SAN JUAN RIVER
STATION LOCATION SAN JUAN RIVER AT
SHIPROCK, NEW MEXICO 93

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	20	62	9	6	0	2	30	16	30	16	4	26	106	42	110	49						
8	27	62	9	11	0	3	18	13	18	13	9	32	111	52	120	61						
9	4	62	9	20	1	2	5	6	6	6	7	32	26	46	33	56						
9	10	62	10	1	1	2	6	6	7	6	22	26	34	38	56	46						
9	17	62	10	10	2	3	15	10	17	10	23	33	35	49	58	59						
9	24	62	10	18	1	3	2	4	3	5	49	28	38	27	87	39						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE NEW MEXICO
MAJOR BASIN COLORADO RIVER
MINOR BASIN SAN JUAN RIVER
STATION LOCATION SAN JUAN RIVER AT
SHIPROCK, NEW MEXICO 93

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	400	0	0	0	0	20	0	0	410	0	190																				
10	16	61	1300	0	0	60	0	20	0	60	1140	0	20	87	2	91	1																
11	6	61	600	0	0	0	40	0	0	0	560	0	0	85	1	87	1																
11	20	61	1800	0	20	0	0	40	0	80	1640	0	500	82	2	87	2	92	1														
12	4	61	2900	0	20	0	0	20	0	0	2880	0	390	87	4	82	2	91	2	85	1	92	1										
12	18	61	500	0	0	0	0	20	0	20	480	0	0	82	1	87	1																
1	2	62	800	0	0	0	0	20	0	0	770	0	40	87	2	82	1																
1	15	62	500	0	0	0	0	20	0	20	440	0	40	87	1																		
2	5	62	500	0	0	0	0	0	0	20	470	0	310	87	1																		
2	20	62	300	0	0	0	0	0	0	0	270	0	290																				
3	5	62	1100	0	0	0	0	0	0	0	1110	0	410	87	2	92	2	91	1														
3	19	62	4500	0	0	20	20	100	0	80	4310	0	970	87	4	92	3	91	3	82	2	85	1										
4	2	62	500	0	0	0	0	0	40	20	480	0	40	82	1																		
4	16	62	600	0	0	0	0	0	0	50	540	20	450																				
5	7	62	1100	0	0	0	0	60	0	60	930	0	20	87	2																		
5	21	62	1000	0	0	0	0	0	110	170	760	130	630																				
6	4	62	200	0	0	0	0	20	0	20	200	0	720																				
6	18	62	800	0	20	0	0	0	0	80	680	300	840	92	1																		
7	2	62	2500	0	0	40	0	170	0	80	2220	40	310	92	2	87	1	97	1	81	1	88	1										
7	16	62	1700	0	0	0	0	0	0	0	1740	0	330	92	3	81	2																
8	6	62	2100	0	0	20	40	0	0	500	1530	170	1040	79	3	69	2	92	2														
8	20	62	4200	0	0	0	0	0	0	3330	840	40	890	68	5	88	2																
9	4	62	39500	130	0	2070	0	0	0	2150	35110	340	5870	88	8	73	5	87	5	30	3	79	2	44	2	38	1	40	1				
9	17	62	19000	630	0	1270	0	0	0	3250	13840	340	2490	73	6	68	5	88	5	87	4	97	3	38	3	92	3	78	2	3	2	74	1

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	NEW MEXICO
MAJOR BASIN	COLORADO RIVER
MINOR BASIN	SAN JUAN RIVER
STATION LOCATION	SAN JUAN RIVER AT SHIPROCK, NEW MEXICO 093

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	92	15	41	15	36	15	47	7	48	0	0	0											0							0	0
10	16	61										0	0	0											0							0	0
11	6	61										0	0	0											0							0	0
11	20	61	36	35	65	24	92	15	86	5	21	0	0	0											0							0	0
12	4	61	65	45	36	20	86	11	51	6	18	0	0	1											0							1	0
12	18	61	36	40	65	23	62	7	92	5	25	0	0	0											0							0	0
1	2	62	65	49	36	21	86	11	51	6	13	0	0	0											0							0	0
1	15	62	65	39	36	15	86	13	51	8	25	60	0	0											0							0	0
2	5	62	65	47	36	15	86	11	51	7	20	0	0	0											0							0	0
2	20	62										0	0	0											0							0	0
3	5	62	92	13	65	11	86	8	36	6	62	0	0	0											0							0	0
3	19	62	65	30	92	14	36	11	86	10	35	20	0	0											0							0	0
4	2	62	36	27	41	18	65	16	86	13	26	0	0	1											0							0	0
4	16	62										0	0	0											0							0	0
5	7	62	65	35	86	11	92	7	36	6	41	0	0	0											0							0	0
5	21	62	92	12	41	12	14	11	36	9	56	80	0	0											0							–	–
6	4	62	92	16	65	13	14	10	36	6	55	130	0	0											0							1	0
6	18	62	92	26	65	10	14	9	2	5	50	40	0	0											0							0	0
7	2	62	92	15	14	11	65	9	86	6	59	20	0	0											0							0	0
7	16	62	92	29	31	17	93	13	62	5	36	0	0	4											0							1	0
8	6	62	15	23	16	17	92	16	58	7	37	0	0	117	11	5									0							0	0
8	20	62	26	78	70	5	71	3	2	3	11	0	0	147	6	4	13	4	22	2					0							0	8
9	4	62	71	60	70	15	2	8	26	8	9	0	0	79	16	3	22	2	13	1	6	1	2	1	0							0	100
9	17	62	2	35	26	24	71	11	34	5	25	0	0	100	13	4	4	2	16	1	22	1			6	76	2					1	1

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE NEW MEXICO
MAJOR BASIN COLORADO RIVER
MINOR BASIN SAN JUAN RIVER
STATION LOCATION SAN JUAN RIVER AT
SHIPROCK, NEW MEXICO 93

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	2	61	10	24	3455#	96	18	78	0	2	11	3	1	7	0	2	1	1	1
11	6	61	11	27	7510	57	12	45	1	3	5	1	1	3	0	2	0	0	1
12	4	61	1	2	2484	157	34	123	1	4	19	3	2	14	0	4	1	1	4
1	2	62	1	15	2277	195	50	145	1	12	23	5	3	14	1	5	2	1	6
2	5	62	2	19	30	*	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9	62	3	19	3300	167	36	131	1	9	13	2	1	10	0	4	2	0	7
4	2	62	4	9	3410	228	69	159	4	21	21	1	1	17	2	7	6	1	9
5	7	62	5	16	2822	189	118	71	6	35	26	2	2	21	1	13	12	1	25
6	4	62	6	25	1625	197	75	122	2	22	19	2	2	14	1	8	6	2	16
7	2	62	7	11	3594	88	32	56	1	9	12	2	1	9	0	3	2	1	4
8	6	62	8	13	4432	106	39	67	1	11	14	1	1	12	0	5	3	1	4
9	4	62	9	10	3397	227	50	177	1	16	19	1	1	17	0	5	3	1	5

ESTIMATED

* LOW FLOW - NOT PROCESSED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW MEXICO
MAJOR BASIN COLORADO RIVER
MINOR BASIN SAN JUAN RIVER
STATION LOCATION SAN JUAN RIVER AT
SHIPROCK, NEW MEXICO 93

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	3	61	13.0	9.0	7.8	1.1	-	-	-	.1	21	100	202	8	625	140	-	400	-
10	4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	560
10	11	61	13.0	8.3	8.0	1.5	-	-	-	1.9	33	128	272	6	650	220	-	570	640
10	16	61	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-
10	17	61	16.0	8.1	8.2	1.2	-	-	-	.1	24	104	186	3	1250	370	-	-	170000
10	23	61	10.0	9.0	8.2	1.3	-	-	-	.0	22	106	206	4	320	190	-	390	-
10	25	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14000
10	30	61	6.0	9.4	8.1	1.6	-	-	-	.1	27	108	214	7	210	206	-	360	11000
11	7	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30000
11	8	61	5.0	11.2	8.2	2.9	-	-	-	.2	32	130	230	-	2150	248	-	500	-
11	14	61	5.0	9.3	8.2	2.3	8	-	-	.1	31	122	250	5	287	250	-	500	15000
11	20	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18000
11	22	61	2.0	10.2	8.3	1.5	-	-	-	.1	29		244	4	117	220	-	560	-
11	27	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1900
11	28	61	5.0	10.3	8.2	2.0	-	-	-	.0	28	112	228	1	4	165	.5	-	-
12	5	61	6.0	12.0	8.1	1.3	-	-	-	-	34	118	230	3	56	190	.4	-	*100
12	13	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*100
12	19	61	.0	9.3	8.3	.7	-	-	-	.2	40	144	292	-	80	-	-	720	26000
12	26	61	.0	11.8	7.9	2.4	-	-	-	.0	42	160	342	-	18	340	-	700	-
1	2	62	.0	7.2	8.1	.8	-	-	-	.2	40	156	322	-	24	300	-	720	-
1	8	62	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-
1	9	62	-	-	8.2	2.9	-	-	-	1.7	40	150	320	1	18	220	-	620	100
1	15	62	.0	9.5	8.1	.4	-	-	-	.3	48	154	368	-	30	275	-	780	-
1	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	700
1	23	62	.0	11.3	8.1	2.0	-	-	-	1.8	43	140	328	-	42	255	-	820	2300
1	31	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80
2	1	62	.0	8.1	8.0	2.4	-	-	-	.2	-	142	362	-	12	250	-	-	-
2	6	62	1.0	10.0	7.8	2.1	-	-	-	.2	39	134	320	3	53	340	-	652	2800
2	13	62	8.0	-	8.0	-	-	-	-	.0	43	122	234	-	2800	235	-	660	-
2	20	62	3.0	8.9	7.9	3.4	-	-	-	.1	37	126	292	-	2380	-	-	-	-
2	26	62	3.0	9.1	8.2	1.7	-	-	-	.1	43	144	316	2	900	270	-	604	51000
3	5	62	2.0	9.0	8.1	2.8	-	-	-	.1	41	130	294	-	575	225	-	600	100
3	12	62	3.0	9.2	8.1	2.7	16	-	-	.2	42	120	286	-	320	244	-	544	100
3	19	62	10.0	7.5	8.7	4.1	5	-	-	-	42	120	272	-	430	212	-	540	37000
3	26	62	11.0	9.6	8.1	3.8	-	-	-	.1	35	110	250	3	2800	135	1.1	480	59000
4	3	62	11.0	9.0	8.2	3.0	-	-	-	.1	30	98	190	-	1250	140	.9	460	-
4	9	62	15.0	8.4	7.8	3.6	-	-	-	.1	15	90	154	-	57	107	-	340	4400
4	16	62	17.0	7.8	8.0	7.0	-	-	-	.1	12	78	118	-	4875	-	.9	332	18000
4	23	62	10.0	7.9	7.8	2.6	-	-	-	.1	17	66	112	-	800	-	-	-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW MEXICO
MAJOR BASIN COLORADO RIVER
MINOR BASIN SAN JUAN RIVER
STATION LOCATIONSAN JUAN RIVER AT
SHIPROCK, NEW MEXICO 93

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
4	30	62	10.0	9.2	7.9	2.8	-	-	-	.0	9	64	114	-	276	42	-	224	2600
5	8	62	14.0	5.4	7.9	-	-	-	-	-	17	74	108	-	1500	54	-	176	-
5	14	62	12.0	7.0	8.0	.4	-	-	-	.1	11	62	74	2	285	37	-	152	-
5	21	62	23.0	-	7.9	-	-	-	-	.1	16	78	120	-	238	78	-	272	-
5	28	62	12.0	9.0	8.1	3.3	-	-	-	.1	12	80	114	-	174	68	.8	224	-
6	11	62	17.0	5.8	8.1	.8	17	-	-	.4	10	60	102	-	153	42	.6	170	1100
6	19	62	20.0	7.9	8.0	.9	-	-	-	.1	10	70	114	-	87	62	.5	184	-
6	25	62	18.0	7.7	8.2	-	-	-	-	.3	10	60	116	-	-	32	.4	144	100
7	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000
7	3	62	20.0	6.0	8.4	.3	-	-	-	.1	19	66	132	2	165	88	.4	246	-
7	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
7	10	62	21.0	-	8.4	-	-	-	-	.1	20	78	72	2	23	130	-	390	-
7	11	62	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
7	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18000
7	23	62	24.0	8.7	8.5	.2	0	-	-	.1	34	104	248	-	16	180	-	590	13000
7	30	62	21.0	6.6	8.5	2.0	-	-	-	.0	35	120	262	-	10	135	-	-	-
8	7	62	21.0	7.6	8.4	.8	-	-	-	.1	42	134	290	2	17	212	-	660	-
8	13	62	24.0	7.3	8.6	-	-	-	-	.1	35	135	306	-	22	272	-	780	100
8	20	62	24.0	10.5	8.4	-	-	-	-	.2	106	180	640	-	5	580	-	1660	3200
8	28	62	25.0	8.1	8.4	-	-	-	-	.1	97	154	630	-	-	550	-	1680	-
9	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400
9	5	62	20.0	8.7	8.4	3.9	-	-	-	-	68	168	496	-	-	370	-	1210	-
9	10	62	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-	16000
9	11	62	14.0	9.5	8.2	4.3	-	-	-	.1	73	168	500	-	10	320	-	1100	-
9	18	62	26.0	10.8	8.5	.0	-	-	-	.2	83	150	568	-	-	380	-	1420	1200
9	24	62	20.0	7.0	8.1	4.9	-	-	-	.0	60	166	352	-	260	260	-	840	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Shiprock, New Mexico
Operated by U.S. Geological Survey

STATE	New Mexico
MAJOR BASIN	Colorado River
MINOR BASIN	San Juan River
STATION LOCATION	San Juan River at Shiprock, New Mexico

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	1.380	1.620	.934	.520	.600	.680	2.230	6.030	3.180	2.710	.695	.062
2	1.160	1.640	.923	.500	.600	.666	2.110	5.050	3.280	2.520	.575	.088
3	1.000	1.590	.901	.500	.600	.755	2.370	4.690	3.790	2.290	.652	.128
4	.923	1.260	.890	.500	.650	.811	2.920	4.660	4.460	2.040	.527	.109
5	.879	1.070	.890	.520	.700	.795	3.320	5.290	4.720	1.960	.457	.052
6	.835	1.010	.879	.540	.800	.803	3.500	6.360	5.510	1.880	.494	.132
7	.795	1.030	.699	.570	.950	.811	3.720	6.980	5.950	1.760	.445	.180
8	.745	.989	.663	.600	1.100	.878	3.740	8.120	6.250	1.770	.433	.188
9	1.020	1.030	.637	.580	1.600	.938	3.640	8.410	5.730	1.710	.388	.159
10	3.270	1.000	.600	.560	2.400	.956	3.520	9.000	5.880	1.630	.335	.155
11	3.630	1.000	.550	.530	2.500	.920	3.360	9.330	6.320	1.540	.335	.125
12	2.180	.956	.450	.530	2.240	.835	3.080	9.250	6.400	1.430	.310	.132
13	1.560	.989	.400	.550	2.020	.787	3.030	9.250	6.660	1.500	.315	.118
14	1.450	1.000	.500	.560	2.110	.779	3.450	8.490	6.810	1.400	.325	.143
15	1.460	.868	.600	.560	2.160	.779	4.790	7.320	6.660	1.240	.292	.143
16	1.510	.805	.700	.530	1.930	.771	5.730	5.770	5.920	1.150	.292	.139
17	1.400	.956	.650	.540	1.930	.771	6.980	4.760	4.890	1.060	.234	.135
18	1.420	1.010	.650	.550	1.690	.878	7.490	4.230	4.050	.974	.135	.115
19	1.480	1.080	.650	.580	1.320	1.050	8.280	3.630	3.450	.903	.102	.135
20	1.460	1.070	.630	.600	1.160	1.220	9.000	3.420	3.990	.860	.074	.155
21	1.350	1.030	.630	.600	1.090	1.420	9.460	3.450	5.050	.878	.072	.579
22	1.320	1.030	.650	.600	1.040	1.500	9.380	3.930	5.290	.903	.069	.469
23	1.260	1.000	.650	.600	.938	1.310	7.860	3.790	5.080	.912	.105	.457
24	1.280	.934	.620	.550	.894	1.290	6.730	3.470	5.020	.894	.224	.763
25	1.190	.945	.600	.550	.844	1.210	7.020	3.760	4.790	.929	.188	.819
26	1.090	.978	.580	.550	.886	1.290	7.700	4.230	4.560	.912	.112	1.240
27	1.070	1.040	.550	.550	.811	1.520	7.820	4.020	4.290	.852	.094	1.030
28	1.070	.978	.550	.550	.725	1.850	7.490	4.360	3.600	.740	.082	.929
29	1.040	.956	.530	.550		2.360	7.020	4.050	2.630	.666	.074	1.000
30	1.040	.956	.530	.600		2.780	6.730	3.600	2.330	.596	.069	.878
31	1.310		.530	.600		2.650		3.300		.645	.064	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN SAVANNAH RIVER
STATION LOCATION SAVANNAH RIVER AT
PORT WENTWORTH, GEORGIA 47

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER													RADIOACTIVITY IN PLANKTON				
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	12	0	0	0	0	0	0	4	4	15	4	19	6						
10	9	61	10	20	0	0	0	0	0	0	4	4	21	4	25	6						
10	16	61	10	25	0	1	0	1	0	1	6	4	219	8	225	9						
10	23	61	11	1	-	-	-	-	-	-	7	5	10	8	17	9						
10	30	61	11	9	-	-	-	-	-	-	4	5	44	6	48	8						
10	31	61	11	10	-	-	-	-	-	-	6	5	27	6	33	9						
11	6	61	11	16	1	1	0	1	1	1	6	5	28	6	34	8						
11	13	61	11	24	-	-	-	-	-	-	3	5	10	5	13	7						
11	20	61	11	30	-	-	-	-	-	-	4	5	18	5	22	7						
11	27	61	12	5	-	-	-	-	-	-	4	5	19	5	23	7						
12	4	61	12	14	0	1	0	2	0	2	4	10	50	14	54	17						
12	11	61	12	19	-	-	-	-	-	-	4	6	25	5	29	8						
12	18	61	12	28	-	-	-	-	-	-	17	7	21	6	38	9						
12	26	61	1	3	-	-	-	-	-	-	2	5	8	5	10	7						
1	2	62	1	10	1	1	0	0	1	1	12	4	17	4	29	6						
1	8	62	1	17	-	-	-	-	-	-	16	5	16	5	32	7						
1	15	62	1	24	-	-	-	-	-	-	21	6	34	5	55	8						
1	22	62	1	31	-	-	-	-	-	-	21	5	17	5	38	7						
1	26	62	2	8	-	-	-	-	-	-	31	5	41	4	72	6						
2	5	62	2	14	0	0	0	0	0	0	23	4	22	4	45	6						
2	12	62	2	23	-	-	-	-	-	-	17	6	32	7	49	9						
2	19	62	3	2	-	-	-	-	-	-	23	5	61	6	84	8						
2	26	62	3	9	-	-	-	-	-	-	22	5	41	6	63	8						
3	5	62	3	16	0	0	0	0	0	0	26	5	40	4	66	6						
3	12	62	4	3	-	-	-	-	-	-	41	6	78	6	119	8						
3	19	62	3	30	-	-	-	-	-	-	35	5	51	5	86	7						
3	26	62	4	4	-	-	-	-	-	-	31	4	35	4	66	6						
4	2	62	4	13	0	1	0	1	0	1	21	4	28	4	49	5						
4	9	62	4	26	-	-	-	-	-	-	12	5	26	5	38	7						
4	16	62	4	30	-	-	-	-	-	-	15	5	28	5	43	7						
4	23	62	5	23	-	-	-	-	-	-	6	6	19	6	25	8						
4	30	62	6	4	-	-	-	-	-	-	10	6	21	6	31	8						
5	14	62	6	20	0	1	0	0	0	1	14	6	16	5	30	8						
5	21	62	6	27	-	-	-	-	-	-	11	5	20	5	31	7						
5	28	62	6	27	-	-	-	-	-	-	1	5	19	5	20	7						
6	5	62	7	3	0	0	0	0	0	0	7	5	19	5	26	7						
6	11	62	7	10	-	-	-	-	-	-	26	6	65	6	91	8						
6	18	62	7	31	-	-	-	-	-	-	10	4	19	4	29	6						
6	25	62	7	20	-	-	-	-	-	-	24	3	56	4	80	5						
7	2	62	8	6	0	0	0	0	0	0	2	6	30	6	32	8						
7	9	62	8	10	-	-	-	-	-	-	21	3	26	3	47	4						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN SAVANNAH RIVER
STATION LOCATION SAVANNAH RIVER AT
PORT WENTWORTH, GEORGIA 47

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	16	62	8	3	-	-	-	-	-	-	6	4	20	4	26	6						
7	23	62	8	7	-	-	-	-	-	-	19	6	49	6	68	8						
7	30	62	8	22	-	-	-	-	-	-	1	6	15	6	16	8						
8	6	62	8	23	0	1	0	0	0	1	7	6	18	6	25	8						
8	13	62	8	29	-	-	-	-	-	-	5	5	22	6	27	7						
8	20	62	9	5	-	-	-	-	-	-	9	10	231	9	240	13						
8	27	62	10	6	-	-	-	-	-	-	3	10	80	11	83	15						
9	17	62	10	8	1	1	0	0	1	1	6	5	24	5	30	7						
9	24	62	10	18	-	-	-	-	-	-	4	5	15	6	19	7						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN SAVANNAH RIVER
STATION LOCATION SAVANNAH RIVER AT
PORT WENTWORTH, GEORGIA 47

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	200	0	0	60	0	60	0	20	60	0	20																				
10	16	61	300	0	0	40	0	40	0	170	20	0	40																				
11	6	61	400	0	20	20	0	20	0	80	290	20	80																				
11	20	61	200	0	0	20	0	0	0	190	40	20	0																				
12	4	61	200	0	20	20	0	50	0	90	50	0	50																				
12	18	61	400	0	20	0	0	90	0	110	180	50	110																				
1	2	62	100	0	0	0	0	0	0	120	0	20	0																				
1	22	62	100	0	0	20	0	20	0	50	50	0	0																				
2	6	62	400	0	0	0	0	40	20	250	80	0	100																				
2	19	62	1100	0	0	110	0	320	20	270	380	0	160	51	1																		
3	5	62	200	0	20	0	20	40	0	20	60	0	20																				
3	19	62	700	0	0	20	50	90	0	270	250	20	200	69	1																		
4	2	62	1300	0	0	60	0	290	150	330	460	20	150	51	1	69	1	88	1														
4	16	62	400	0	0	20	0	20	120	100	100	0	20																				
5	7	62	900	0	0	40	20	250	100	330	150	40	20	69	1																		
5	21	62	3100	100	20	600	0	290	120	1200	910	170	210	71	2	25	2	67	2	88	2	68	1	51	1	87	1	69	1				
6	5	62	1100	0	0	90	0	700	0	270	50	70	70	57	3	69	1																
6	18	62	800	0	0	60	0	80	40	310	290	0	150	69	1																		
7	2	62	1400	0	170	190	0	0	0	250	800	170	340	17	1	69	1	88	1														
7	16	62	900	0	0	210	0	170	0	370	150	0	80	69	2	51	1																
8	6	62	2700	0	380	480	0	60	0	720	1010	680	760	16	2	69	2	88	1	73	1	71	1	68	1								
8	20	62	5400	0	0	510	0	0	0	2360	2530	1350	1980	69	4	88	3	67	2	68	2	87	1	73	1	86	1	97	1	25	1		
9	4	62	3300	40	0	130	0	0	0	1270	1860	420	630	88	2	87	2	69	2	67	2	68	1										
9	17	62	100	10	0	10	0	10	0	60	30	90	110																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN SAVANNAH RIVER
STATION LOCATION SAVANNAH RIVER AT
PORT WENTWORTH, GEORGIA 047

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																				
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	56	15	57	14	22	12	58	8	51	390	0	3											1							0	0
10	16	61	57	18	65	11	22	7	19	4	60	8860	0	2											3							0	0
11	6	61	57	22	22	8	65	5	56	5	60	2170	0	4											1							1	1
11	20	61	57	23	56	7	58	5	22	5	60	0	0	0											0							0	0
12	4	61	57	27	56	10	71	10	72	10	43	0	0	6	46	1									0							1	0
12	18	61	56	17	57	13	58	9	86	6	55	0	0	5											0							0	0
1	2	62	57	30	56	10	43	7	58	5	48	0	0	2											0							2	0
1	22	62	57	29	56	18	71	7	65	4	42	0	0	0											0							0	0
2	6	62	57	11	19	10	56	10	43	7	62	0	0	0											1							1	0
2	19	62	56	14	57	11	71	8	29	5	62	90	0	0											0							1	0
3	5	62	19	12	57	11	43	9	71	9	59	0	0	1											2							2	1
3	19	62	43	21	71	8	19	6	56	6	59	90	0	0											0							0	1
4	2	62	57	25	56	9	10	8	71	6	52	60	0	1											0							1	1
4	16	62	57	19	92	17	43	15	56	13	36	0	10	4											0							1	0
5	7	62	57	39	56	21	43	5	92	3	32	0	0	0											4	51	1					0	0
5	21	62	57	30	56	28	71	7	58	4	31	0	0	4											0							0	0
6	5	62	56	27	18	11	58	8	29	5	49	0	0	1											2							0	0
6	18	62	56	30	58	12	57	7	92	3	48	40	0	0											1							0	0
7	2	62	56	16	19	8	88	6	43	5	65	40	0	1											0							0	0
7	16	62	56	53	57	19	58	8	97	2	18	0	0	0											0							0	0
8	6	62	56	32	58	14	57	12	2	8	34	40	0	0											0							0	0
8	20	62	56	28	20	10	46	5	57	4	53	0	0	-											-							-	-
9	4	62	56	26	57	16	65	7	58	4	47	0	0	0											0							0	0
9	17	62	56	31	57	8	18	7	65	5	49	0	0	0											0							2	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN SAVANNAH RIVER
STATION LOCATION SAVANNAH RIVER AT
PORT WENTWORTH, GEORGIA 47

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END			TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY							TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS				
10	4	61	10	20	3330	239	81	158	2	18	20	2	2	15	1	15	8	2	16
11	13	61	11	22	3230	209	100	109	8	25	20	2	2	15	1	14	8	3	22
12	11	61	3	23	3070	*	-	-	-	-	-	-	-	-	-	-	-	-	-
5	7	62	5	22	3870	307	159	148	10	43	32	3	2	24	3	17	19	2	36
7	2	62	7	9	5180	126	61	65	1	17	14	1	1	11	1	7	6	1	15
8	6	62	8	12	4610	176	78	98	2	23	16	1	1	13	1	10	6	1	20

* NOT PROCESSED - FLOW DATA INACCURATE

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE GEORGIA
MAJOR BASIN SOUTHEAST
MINOR BASIN SAVANNAH RIVER
STATION LOCATION SAVANNAH RIVER AT
PORT WENTWORTH, GEORGIA 47

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3800
10	9	61	-	-	-	-	41	-	-	-	-	-	-	-	-	-	-	-	10000
10	16	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	1700
10	19	61	19.7	7.9	7.0	1.0	-	-	-	-	4	19	17	15	28	2	-	46	-
10	23	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11000
10	30	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	650
11	6	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	18000
11	13	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	880
11	15	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	-
11	16	61	18.9	8.0	7.2	1.0	-	-	-	-	7	21	17	10	26	2	-	49	-
11	20	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8800
11	21	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85	-
11	27	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	1800
12	4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4000
12	11	61	-	-	-	-	51	-	-	-	-	-	-	-	-	-	-	48	710
12	18	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51	15000
12	19	61	-	-	-	-	-	-	-	-	-	-	-	-	-	4	.1	-	-
12	21	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-
12	26	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
12	28	61	12.8	8.5	6.8	1.1	-	-	-	-	4	-	-	-	-	-	-	-	-
1	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	2500
1	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
1	15	62	-	-	-	-	-	-	-	-	..	-	-	-	-	-	-	-	2600
1	29	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14000
2	1	62	11.4	8.8	6.5	1.1	-	-	-	-	7	15	14	35	44	4	-	55	-
2	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3000
2	15	62	12.0	9.2	7.0	1.6	-	-	-	-	6	17	15	20	26	5	-	51	-
2	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3000
2	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5100
2	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2100
3	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4400
3	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350
3	15	62	12.8	8.0	6.9	.9	-	-	-	-	4	14	12	35	36	3	-	49	-
3	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1600
3	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	530
4	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5000
4	12	62	22.8	7.1	7.0	1.4	-	-	-	-	7	16	14	50	25	3	-	39	-
4	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90
4	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7800

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE GEORGIA

MAJOR BASIN SOUTHEAST

MINOR BASIN SAVANNAH RIVER

STATION LOCATION SAVANNAH RIVER AT

PORT WENTWORTH, GEORGIA 47

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
5	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3700
5	17	62	23.6	7.3	6.7	2.1	-	-	-	-	5	17	18	25	24	5	-	49	-
5	28	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3500
6	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4700
6	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4100
6	14	62	25.0	7.3	6.9	1.0	-	-	-	-	7	15	18	30	22	5	-	52	-
6	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*10
6	25	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	74	180
7	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4000
7	9	62	-	-	-	-	20	-	-	-	-	-	-	-	-	-	.0	-	21000
7	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	4000
7	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2000
7	30	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1100
8	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3900
8	10	62	27.2	6.8	6.4	1.3	-	-	-	-	9	16	15	10	32	4	-	48	-
8	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5000
8	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	3400
8	27	62	-	-	-	-	-	-	-	-	5	22	24	-	-	5	.0	74	7400
9	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	1500
9	20	62	25.0	6.6	6.7	2.1	-	-	-	-	2	16	15	10	30	3	-	40	-
9	24	62	-	-	-	-	-	-	-	-	16	-	-	10	-	42	.0	-	9800

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Clyo, Georgia
Operated by U.S. Geological Survey

STATE	Georgia
MAJOR BASIN	Southeast
MINOR BASIN	Savannah River
STATION LOCATION	Savannah River at Port Wentworth, Georgia

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	7.160	6.660	7.060	24.200	13.100	16.600	17.400	19.100	7.600	7.600	7.060	7.160
2	6.960	6.660	7.270	23.700	13.700	18.400	17.100	19.100	7.600	7.380	7.380	7.060
3	6.960	6.660	7.380	23.200	14.300	20.900	17.400	18.800	7.820	7.160	7.380	7.060
4	6.860	6.760	7.270	22.800	14.900	23.700	17.400	18.400	7.930	6.960	7.270	6.960
5	6.860	7.060	6.960	22.400	15.500	25.700	17.100	17.800	7.930	6.960	7.380	6.960
6	6.760	6.860	6.860	22.400	16.600	26.200	17.100	17.100	7.820	6.860	7.490	6.960
7	6.560	6.760	6.860	22.000	17.100	26.700	17.100	16.400	7.820	6.760	7.380	7.060
8	6.360	6.660	6.960	21.600	17.100	26.200	17.400	15.700	7.820	6.860	7.270	7.060
9	6.260	6.760	7.060	21.200	15.900	24.700	17.800	14.300	8.260	7.270	7.380	7.060
10	6.260	6.760	7.160	20.900	14.300	22.400	18.400	12.700	8.980	7.270	7.270	6.960
11	6.360	6.760	7.380	20.900	12.500	20.600	19.100	12.000	9.620	7.160	7.060	6.860
12	6.360	6.760	7.270	20.900	11.100	19.100	20.000	11.900	9.760	7.060	6.960	6.860
13	6.360	6.760	7.380	21.200	9.620	17.800	20.300	12.200	9.620	7.060	6.960	6.860
14	6.460	6.760	7.710	21.600	8.740	17.100	20.300	12.500	10.300	7.160	6.760	6.960
15	6.760	6.760	9.340	22.800	8.500	16.800	20.300	12.900	11.400	7.490	6.760	7.160
16	6.660	6.660	11.200	24.700	8.500	17.100	20.600	12.000	12.200	7.930	6.760	7.380
17	6.360	6.660	12.500	26.700	8.860	17.800	21.200	10.600	12.500	7.710	6.960	7.490
18	6.260	6.860	13.500	27.700	8.740	18.800	22.000	9.620	13.300	7.380	7.160	7.380
19	6.160	7.380	14.100	28.200	8.620	20.000	22.400	8.980	13.900	7.160	7.600	7.380
20	6.160	7.270	15.300	26.700	8.740	21.200	23.200	8.860	14.500	7.060	7.600	7.380
21	6.160	6.960	15.900	25.200	9.100	22.800	23.200	8.740	13.500	7.160	7.490	7.380
22	6.460	6.960	16.400	22.800	9.480	24.700	23.200	8.380	12.700	7.490	7.270	7.270
23	6.560	6.960	17.100	21.600	9.760	25.200	22.800	8.150	12.200	7.710	7.270	7.160
24	6.360	6.960	17.600	20.600	11.100	24.200	22.000	8.040	11.900	7.490	7.380	7.270
25	6.460	7.060	18.100	20.000	12.300	22.800	21.600	7.930	11.200	7.160	7.600	7.160
26	6.460	7.270	18.600	18.800	13.500	21.600	21.200	8.040	9.900	7.060	8.040	7.160
27	6.460	7.490	19.100	17.600	14.500	20.900	20.900	7.820	8.500	7.060	8.040	7.490
28	6.660	7.600	19.700	15.900	15.500	20.000	20.300	7.710	7.930	7.380	7.820	7.930
29	6.960	7.380	20.900	13.900		19.100	20.000	7.710	7.710	7.380	7.490	8.620
30	7.060	7.160	22.400	12.700		18.400	19.700	7.710	7.600	7.270	7.380	9.340
31	6.860		23.700	12.500		17.600		7.710		7.060	7.270	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	SOUTH CAROLINA
MAJOR BASIN	SOUTHEAST
MINOR BASIN	SAVANNAH RIVER
STATION LOCATION	SAVANNAH RIVER AT NORTH AUGUSTA, SOUTH CAROLINA 48

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	100	0	0	0	0	0	0	0	20	0	0																				
10	16	61	100	0	0	40	0	0	0	60	0	0	40																				
11	7	61	300	0	20	0	20	40	0	80	100	20	0																				
11	20	61	00	0	0	0	0	0	0	20	0	0	0																				
12	4	61	600	0	0	90	0	140	0	230	160	0	50																				
12	19	61	600	0	0	0	0	90	0	410	140	50	20	68	2																		
1	2	62	1000	20	50	160	0	140	20	320	270	0	20	69	1																		
1	15	62	200	0	0	0	0	0	0	160	0	0	50																				
2	5	62	500	0	0	20	0	0	0	230	200	50	0	69	1																		
2	19	62	700	0	0	20	0	340	0	290	20	20	50	51	1	69	1																
3	6	62	800	0	0	0	0	380	0	340	70	90	20	57	2	71	2																
3	19	62	1300	0	0	40	0	0	0	990	290	120	60	69	3																		
4	5	62	400	0	0	20	0	20	0	80	230	60	40																				
4	17	62	1100	20	0	0	20	0	610	340	110	140	90	65	2	69	1																
5	7	62	800	60	0	100	0	0	0	440	230	0	0	68	2																		
5	21	62	800	20	40	150	20	0	40	420	130	230	210	68	1	69	1																
6	18	62	200	0	0	0	0	60	0	100	20	0	20																				
7	2	62	00	0	0	0	0	0	0	40	0	0	130																				
7	23	62	200	0	0	40	0	0	0	0	120	0	0																				
8	2	62	100	40	0	40	0	0	0	0	40	0	0																				
8	20	62	400	0	0	40	0	120	0	80	120	0	0																				
9	4	62	300	0	0	0	0	120	40	40	80	0	0																				
9	17	62	100	0	10	20	0	10	10	0	30	20	20																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	SOUTH CAROLINA
MAJOR BASIN	SOUTHEAST
MINOR BASIN	SAVANNAH RIVER
STATION LOCATION	SAVANNAH RIVER AT NORTH AUGUSTA, SOUTH CAROLINA 048

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
													PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	57	36	56	9	28	9	58	8	38	0	0	0											0							0	0
10	16	61										0	0	0											0							0	0
11	7	61	56	26	65	20	58	16	57	15	23	0	0	5											0							1	0
11	20	61	56	33	57	14	58	11	65	10	32	0	0	3											0							0	0
12	4	61	56	32	58	19	57	18	28	7	24	50	0	0											0							0	0
12	19	61	56	29	57	16	58	14	65	6	35	50	0	5											0							0	0
1	2	62	57	34	58	13	27	11	65	5	37	140	0	1											0							0	0
1	15	62	56	32	57	29	62	5	58	4	30	0	0	1											0							0	0
2	5	62	57	37	56	27	43	5	28	3	28	70	0	1											0							0	0
2	19	62	57	44	56	26	82	10	2	4	16	0	0	0											0							0	0
3	6	62	57	42	97	21	56	17	92	3	17	0	0	0											0							0	0
3	19	62	57	45	56	39	28	2	95	2	12	0	0	0											0							0	0
4	5	62	57	35	56	34	43	6	92	5	20	0	0	6											1							0	0
4	17	62	57	39	56	20	62	5	92	5	31	0	0	0											0							0	0
5	7	62	57	35	56	30	28	5	90	3	27	20	0	7											1							0	0
5	21	62	57	37	56	21	58	21	28	3	18	0	0	4											1							0	0
6	18	62	57	35	56	20	58	4	43	4	37	0	0	0											0							2	0
7	2	62	56	35	57	32	2	4	31	2	27	0	0	1											0							0	0
7	23	62	56	30	57	18	65	7	2	5	40	0	0	34	11	2									5	51	1					4	0
8	2	62	56	41	57	21	65	4	2	4	30	0	0	1											0							0	0
8	20	62	56	34	57	15	2	8	65	7	34	0	0	3											0							0	0
9	4	62	56	40	64	15	2	9	57	5	31	0	0	9	15	1									0							0	0
9	17	62	65	30	56	24	2	9	57	8	29	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE SOUTH CAROLINA

MAJOR BASIN SOUTHEAST

MINOR BASIN SAVANNAH RIVER

STATION LOCATION SAVANNAH RIVER AT
NORTH AUGUSTA, SOUTH CAROLINA 48

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	16	-	-	-	-	-	-	4	5	5	5	9	7						
10	9	61	10	20	-	-	-	-	-	-	4	5	7	5	11	7						
10	16	61	10	31	0	0	0	0	0	0	0	7	0	7	0	10						
10	23	61	11	1	-	-	-	-	-	-	2	5	6	5	8	7						
10	31	61	11	13	-	-	-	-	-	-	0	5	11	6	11	8						
11	7	61	11	21	-	-	-	-	-	-	0	5	5	5	5	7						
11	13	61	11	24	-	-	-	-	-	-	7	5	2	5	9	7						
11	20	61	11	30	0	0	0	0	0	0	3	4	5	4	8	6						
11	27	61	12	5	-	-	-	-	-	-	2	5	6	5	8	7						
12	19	61	12	28	0	1	0	0	0	1	15	4	12	4	27	6						
12	26	61	1	5	-	-	-	-	-	-	5	6	7	5	12	8						
1	2	62	1	15	-	-	-	-	-	-	14	5	12	4	26	7						
1	8	62	1	22	-	-	-	-	-	-	35	9	79	6	114	11						
1	15	62	1	24	0	0	0	0	0	0	17	6	7	5	24	8						
1	23	62	1	31	-	-	-	-	-	-	56	10	25	7	81	12						
1	30	62	2	13	-	-	-	-	-	-	70	8	66	6	136	10						
2	5	62	2	15	-	-	-	-	-	-	17	5	10	5	27	7						
2	26	62	3	21	0	1	0	0	0	1	43	10	16	4	59	11						
3	6	62	3	16	-	-	-	-	-	-	19	6	8	5	27	8						
3	13	62	3	26	-	-	-	-	-	-	166	11	160	7	326	13						
3	19	62	4	2	1	1	0	0	1	1	26	5	15	4	41	6						
3	26	62	4	9	-	-	-	-	-	-	30	5	18	4	48	6						
4	2	62	4	13	-	-	-	-	-	-	39	7	72	8	111	11						
4	9	62	4	20	-	-	-	-	-	-	167	16	74	6	241	17						
4	17	62	5	1	0	1	0	0	0	1	25	5	17	5	42	7						
4	24	62	5	23	-	-	-	-	-	-	22	7	15	7	37	10						
5	7	62	6	20	-	-	-	-	-	-	21	7	25	7	46	10						
5	14	62	6	25	-	-	-	-	-	-	26	7	18	6	44	9						
5	21	62	6	27	0	1	0	0	0	1	18	6	12	6	30	8						
6	11	62	7	10	-	-	-	-	-	-	11	11	18	5	29	12						
6	18	62	8	13	1	1	2	2	3	2	46	4	68	6	114	7						
6	25	62	7	26	-	-	-	-	-	-	10	6	6	5	16	7						
7	2	62	7	31	-	-	-	-	-	-	6	6	4	5	10	7						
7	23	62	8	7	0	0	0	0	0	0	11	5	11	5	22	7						
8	20	62	9	6	0	0	0	0	0	0	6	5	5	5	11	7						
9	4	62	9	27	-	-	-	-	-	-	0	9	22	7	22	11						
9	10	62	10	2	-	-	-	-	-	-	7	6	4	6	11	8						
9	17	62	10	15	0	0	0	0	0	0	13	6	11	5	24	7						
9	24	62	10	19	-	-	-	-	-	-	0	4	7	4	7	6						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE	SOUTH CAROLINA
MAJOR BASIN	SOUTHEAST
MINOR BASIN	SAVANNAH RIVER
STATION LOCATION	SAVANNAH RIVER AT NORTH AUGUSTA, SOUTH CAROLINA 48

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	10	61	10	16	3857	179	59	120	-	-	-	-	-	-	-	-	-	-	-
11	13	61	11	19	3813	219	71	148	-	-	-	-	-	-	-	-	-	-	-
11	13	61		*	7670	198	64	134	6	17	21	2	2	16	1	6	5	1	8
1	2	62	1	14	2674	350	149	201	3	40	31	2	1	27	1	15	15	3	42
2	5	62	2	14	2395	242	63	179	-	-	-	-	-	-	-	-	-	-	-
3	9	62	3	19	1835	518	159	359	-	-	-	-	-	-	-	-	-	-	-
3	9	62		*	4230	354	102	252	9	28	23	2	2	17	2	10	8	1	23
4	6	62	4	16	3244	293	122	171	9	37	22	3	2	14	3	11	13	1	29
5	4	62	5	17	3455	226	132	94	5	40	28	4	1	20	3	12	18	1	28
7	1	62	7	14	6528	154	94	60	3	29	16	1	1	14	0	13	12	1	20
8	6	62	8	13	6737	119	58	61	2	16	12	1	1	10	0	5	6	1	16

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE	SOUTH CAROLINA
MAJOR BASIN	SOUTHEAST
MINOR BASIN	SAVANNAH RIVER
STATION LOCATION	SAVANNAH RIVER AT NORTH AUGUSTA, SOUTH CAROLINA 48

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	22.9	-	7.5	-	-	-	-	-	3	28	22	-	5	-	-	-	-
10	9	61	21.0	-	7.5	-	-	-	-	-	3	30	18	-	12	-	-	-	-
10	10	61	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
10	16	61	12.5	-	7.3	-	-	-	-	-	3	24	22	-	8	-	-	-	-
10	23	61	12.9	-	7.3	-	-	-	-	-	3	26	20	-	5	-	-	-	-
10	30	61	18.9	-	7.3	-	-	-	-	-	3	28	22	5	5	3	.0	34	-
11	7	61	20.1	-	7.3	-	-	-	-	-	3	20	26	5	8	3	.0	45	-
11	13	61	19.0	-	7.6	-	11	-	-	-	3	26	24	-	8	3	.0	42	-
11	20	61	15.5	-	7.6	-	-	-	-	-	3	28	29	-	8	6	.0	-	-
11	27	61	14.9	-	7.4	-	-	-	-	-	3	26	16	-	10	5	.1	-	-
12	4	61	14.9	-	7.4	-	-	-	-	-	3	24	20	-	10	-	-	-	-
12	12	61	15.5	-	7.3	-	-	-	-	-	3	28	28	-	10	-	-	-	-
12	19	61	14.3	-	7.1	-	-	-	-	-	3	26	20	-	20	-	-	-	-
12	26	61	11.5	-	7.3	-	-	-	-	-	3	26	26	5	20	9	.1	-	-
1	2	62	8.8	-	7.4	-	-	-	-	-	4	28	34	5	25	9	-	50	-
1	8	62	-	-	-	-	38	-	-	-	-	10	-	-	-	6	.1	-	-
1	15	62	8.9	-	6.9	-	-	-	-	-	2	24	32	-	25	15	-	-	-
1	23	62	9.5	-	6.7	-	-	-	-	-	3	14	22	-	35	6	.1	-	-
1	30	62	9.9	9.4	7.0	-	-	-	-	-	4	26	24	-	60	15	-	-	-
2	5	62	11.9	-	7.3	-	-	-	-	-	3	22	40	-	20	15	.0	-	-
2	12	62	11.0	-	7.3	-	-	-	-	-	4	22	38	-	15	-	-	-	4500
2	14	62	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-
2	19	62	10.5	11.5	7.1	-	-	-	-	-	4	24	30	-	15	-	-	-	-
2	26	62	11.8	11.0	7.1	-	-	-	-	-	3	22	28	-	50	-	-	-	1000
3	6	62	8.9	-	7.4	-	-	-	-	-	3	20	28	-	20	-	-	-	-
3	19	62	12.5	11.8	7.4	-	-	-	-	-	3	18	20	-	20	-	-	-	-
3	26	62	13.5	-	7.2	-	-	-	-	-	3	24	26	-	20	-	-	-	-
4	2	62	14.9	-	7.2	-	-	-	-	-	5	26	24	40	50	3	-	-	-
4	9	62	15.8	9.7	7.1	-	23	-	-	-	4	24	22	40	50	11	.1	-	20000
4	17	62	13.9	-	7.2	-	-	-	-	-	4	24	22	25	25	17	.0	-	600
4	24	62	15.0	-	7.3	-	-	-	-	-	4	22	32	5	25	56	.0	-	-
4	30	62	19.5	-	7.4	-	-	-	-	-	4	28	36	-	20	-	-	-	-
5	7	62	19.9	-	7.7	-	-	-	-	-	4	26	20	15	20	8	.0	-	200
5	14	62	18.5	-	7.2	-	-	-	-	-	5	22	14	-	25	-	-	-	*200
5	21	62	19.2	-	7.1	-	-	-	-	-	3	24	14	20	25	7	.0	-	-
6	11	62	20.0	-	7.2	-	-	-	-	-	3	16	12	10	25	13	.0	-	-
6	18	62	21.9	-	7.2	-	-	-	-	-	4	16	12	-	20	-	-	-	-
6	25	62	20.0	-	7.1	-	-	-	-	-	5	15	14	-	20	-	-	-	20
7	2	62	19.9	-	7.1	-	-	-	-	-	4	16	18	-	15	-	-	-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE SOUTH CAROLINA
MAJOR BASIN SOUTHEAST
MINOR BASIN SAVANNAH RIVER
STATION LOCATION SAVANNAH RIVER AT
NORTH AUGUSTA, SOUTH CAROLINA 48

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	14	62	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-
8	12	62	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-
9	10	62	23.0	-	7.4	-	-	-	-	-	7	14	12	10	5	5	.0	-	-
9	17	62	21.9	-	7.1	-	-	-	-	-	3	16	14	-	5	-	-	-	-
9	24	62	-	-	-	-	-	-	-	-	-	-	-	5	-	1	-	48	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Augusta, Georgia
Operated by U.S. Geological Survey

STATE	South Carolina
MAJOR BASIN	Southeast
MINOR BASIN	Savannah River
STATION LOCATION	Savannah River at North Augusta, South Carolina

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	5.790	5.570	5.790	11.700	15.200	21.900	8.240	12.000	6.120	5.350	5.570	5.790
2	5.790	6.010	4.930	15.200	14.600	22.500	12.100	12.000	6.340	5.350	5.900	5.790
3	5.680	6.120	4.930	17.300	10.600	17.500	15.200	12.400	6.010	5.240	6.450	5.680
4	5.570	5.240	4.930	16.900	5.600	7.250	17.700	11.400	6.010	5.240	6.120	5.900
5	5.570	5.460	5.030	16.600	5.380	5.600	20.700	10.100	6.010	5.240	5.790	5.900
6	5.570	5.350	5.130	14.100	6.150	7.470	17.700	7.330	6.230	5.680	5.790	5.900
7	5.570	5.680	5.130	20.400	7.250	8.460	13.700	7.330	7.220	5.790	5.790	5.790
8	5.460	5.680	5.680	26.900	7.140	7.910	7.800	9.870	8.210	5.460	5.790	5.680
9	5.460	5.570	5.460	26.600	6.590	8.350	14.200	9.630	8.670	5.350	6.010	5.570
10	5.460	5.680	5.130	21.300	5.380	5.930	16.400	10.100	7.440	5.350	6.230	5.680
11	5.570	5.790	5.030	25.700	5.160	6.040	13.800	12.800	8.100	5.350	6.120	5.680
12	6.010	5.570	5.430	27.900	4.960	14.900	15.800	11.200	12.900	5.680	5.790	5.900
13	6.340	5.350	11.300	21.400	4.960	22.500	24.700	6.890	13.900	6.670	5.790	6.340
14	5.790	5.350	13.900	14.100	6.040	25.700	22.500	7.000	17.400	6.450	5.790	6.670
15	5.570	5.460	15.100	11.100	6.480	23.400	16.800	7.110	16.600	5.680	5.790	6.230
16	5.570	6.450	15.500	14.100	4.960	21.900	13.900	6.120	12.800	5.460	6.230	5.900
17	5.460	6.340	15.300	16.300	4.760	19.500	17.600	6.450	6.560	5.350	6.450	6.120
18	5.460	5.240	12.100	16.400	4.860	12.500	17.700	6.890	6.120	5.350	6.230	6.120
19	5.680	5.130	17.500	16.600	4.960	10.500	17.700	6.670	9.390	5.680	5.790	6.120
20	6.340	5.130	21.000	15.400	4.960	13.800	17.700	6.230	9.150	6.450	5.900	6.010
21	5.570	5.130	24.400	8.920	5.490	13.700	16.900	6.120	9.030	6.230	5.790	6.010
22	5.570	5.130	28.200	5.600	10.400	14.600	12.400	6.120	9.270	5.680	5.790	6.230
23	5.570	5.460	27.300	6.920	24.700	15.400	11.200	6.670	6.560	5.570	6.450	5.680
24	5.460	5.570	17.500	6.810	26.300	10.800	15.800	6.670	5.570	5.570	6.780	5.790
25	5.680	5.900	12.700	7.030	19.000	5.160	16.600	6.340	5.460	5.900	6.230	5.790
26	6.120	5.570	15.800	5.710	16.100	6.370	16.800	6.120	5.350	6.670	5.900	6.010
27	6.560	5.130	17.700	5.060	19.500	10.300	17.300	5.900	5.570	5.790	5.900	7.000
28	5.680	5.030	18.500	6.700	21.900	14.200	14.800	5.900	6.230	5.680	5.900	7.660
29	5.350	5.130	18.500	11.900		13.100	7.330	5.790	5.900	5.570	5.900	7.000
30	5.350	5.900	17.200	18.100		12.300	11.600	5.790	5.570	5.570	5.900	5.570
31	5.460		11.600	15.000		8.900		5.900		5.570	5.900	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE-SCHUYLKILL RIVERS
STATION LOCATION SCHUYLKILL RIVER AT
PHILADELPHIA, PENNSYLVANIA 74

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	16	61	10	30	-	-	-	-	-	-	0	10	16	14	16	17						
11	6	61	11	22	-	-	-	-	-	-	0	8	3	11	3	14						
12	4	61	12	14	-	-	-	-	-	-	0	5	10	7	10	9						
12	18	61	12	29	2	2	1	1	3	2	49	9	51	7	100	11						
1	2	62	1	26	-	-	-	-	-	-	16	5	31	6	47	8						
1	15	62	1	25	-	-	-	-	-	-	7	5	15	7	22	9						
2	5	62	2	16	0	1	0	1	0	1	7	4	22	6	29	7						
2	19	62	3	2	0	1	0	2	0	2	26	11	29	13	55	17						
3	5	62	3	19	-	-	-	-	-	-	23	5	24	7	47	9						
3	19	62	4	4	1	1	0	1	1	1	13	6	20	6	33	9						
4	2	62	4	17	-	-	-	-	-	-	78	10	30	7	108	12						
4	16	62	4	27	-	-	-	-	-	-	9	6	15	7	24	9						
5	7	62	7	11	-	-	-	-	-	-	33	7	15	7	48	10						
5	21	62	6	22	-	-	-	-	-	-	2	3	13	5	15	6						
6	4	62	8	1	-	-	-	-	-	-	4	11	27	14	31	18						
6	19	62	8	14	-	-	-	-	-	-	11	10	9	6	20	12						
7	2	62	8	7	-	-	-	-	-	-	6	6	29	10	35	12						
7	16	62	8	14	-	-	-	-	-	-	2	5	15	8	17	9						
8	6	62	10	8	-	-	-	-	-	-	4	10	19	14	23	17						
8	20	62	9	6	0	0	0	0	0	0	4	5	27	8	31	9						
9	17	62	10	12	-	-	-	-	-	-	0	17	17	17	17	24						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE-SCHUYLKILL RIVERS
STATION LOCATION SCHUYLKILL RIVER AT
PHILADELPHIA, PENNSYLVANIA 74

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	3	61	7000	40	0	3580	0	2360	0	580	410	20	290	38	5	51	4	68	2	29	1	52	1										
10	16	61	3600	0	0	1740	0	460	0	850	520	190	440	38	3	68	3	51	2	34	2	88	1										
11	6	61	3500	0	40	1300	0	1470	0	410	310	40	80	51	4	38	3	34	2	68	2												
11	20	61	500	0	0	110	0	20	0	40	330	20	100																				
12	4	61	300	0	0	20	0	40	0	20	190	0	0																				
12	18	61	400	0	0	20	0	40	20	20	310	0	100																				
1	2	62	600	0	70	20	0	110	0	90	270	0	20																				
1	15	62	400	0	0	0	20	20	0	160	180	0	270	68	1																		
2	5	62	2300	160	200	0	0	110	0	1690	140	20	20	71	4	68	2																
2	19	62	700	0	0	0	0	180	20	230	230	0	90	71	1	51	1																
3	5	62	300	0	0	0	0	20	0	20	250	40	20																				
3	19	62	400	120	0	0	0	0	0	40	190	0	120																				
4	2	62	2300	0	0	20	0	170	20	190	1950	40	410	84	1	82	1	92	1														
4	16	62	1100	0	0	0	0	120	20	170	810	20	100	87	1																		
5	7	62	9000	1720	0	1240	0	2150	130	1180	2570	100	480	51	4	92	4	68	3	3	3	4	3	33	2	34	1	87	1	88	1		
5	21	62	15400	950	0	11470	0	790	0	250	1900	120	210	38	6	25	5	51	3	92	3	35	3	44	3	3	2	33	2	88	2	87	2
6	4	62	6600	380	0	2980	0	1950	50	540	680	70	520	51	4	38	4	68	2	3	2	24	2	92	1	88	1	33	1	40	1		
6	19	62	41500	830	40	12880	40	20490	620	2190	4390	170	700	51	8	38	6	25	4	88	4	3	3	92	3	87	3	40	3	60	2	45	2
7	2	62	63300	680	250	47940	0	1650	0	7600	5230	1310	1560	38	8	44	7	68	6	88	4	29	4	51	4	25	4	31	3	40	3		
7	16	62	47100	540	0	31220	0	1530	170	1620	12010	1080	660	38	8	88	7	25	5	68	4	51	4	44	3	73	3	34	3	40	3	33	3
8	6	62	40300	970	210	16410	0	930	590	15450	5780	5320	1600	68	7	38	7	88	5	51	3	32	3	40	3	9	3	62	2	25	2	87	2
8	20	62	45300	680	40	21190	0	5610	0	11100	6670	5910	2240	38	7	68	7	51	6	88	5	87	3	37	3	40	3	3	3	25	2	30	2
9	17	62	10700	200	230	8360	0	450	0	470	1010	1730	520	38	6	88	3	26	3	40	2	68	2	51	1	17	1	3	1				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	PENNSYLVANIA
MAJOR BASIN	NORTH ATLANTIC
MINOR BASIN	DELAWARE-SCHUYLKILL RIVERS
STATION LOCATION	SCHUYLKILL RIVER AT PHILADELPHIA, PENNSYLVANIA 074

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)*									FUNGI AND SHEATHED BACTERIA *Number per ml.*	PROTOZOA *(Identifiable)* *Number per ml.*	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							NEMATODES *(Identifiable)* *Number per liter*	OTHER ANIMAL FORMS *(Number per liter)*
														NUM-BER PER LITER	GENERA AND COUNT LEVEL *(See text for Codes)*										NUM-BER PER LITER	GENERA AND COUNT LEVEL *(See text for Codes)*							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	3	61	62	11	70	9	2	6	92	6	68	0	0	32	20	3									0							0	0
10	16	61	62	18	26	10	70	9	89	5	58	0	0	17	15	2									3							0	0
11	6	61	26	24	70	17	65	6	92	5	48	0	0	280	15	6	20	1							2							0	0
11	20	61	26	25	70	16	92	10	74	8	41	0	10	43	20	3									0							0	0
12	4	61	70	20	71	12	2	6	93	6	56	0	10	49	15	4									0							0	0
12	18	61	70	47	65	5	93	5	2	4	39	20	0	0											0							0	0
1	2	62	70	42	2	6	64	5	65	4	43	230	0	2											0							1	0
1	15	62	62	18	36	10	64	5	71	4	63	160	0	1											1							2	0
2	5	62	82	15	70	12	92	5	62	6	62	180	10	2											1							2	0
2	19	62	82	33	70	13	2	9	93	4	41	0	0	1											0							2	0
3	5	62	65	6	66	6	36	6	62	6	76	40	0	2											0							0	0
3	19	62	62	12	71	9	36	5	70	4	70	230	0	1											0							0	0
4	2	62	36	14	47	13	62	8	65	7	58	0	0	0											0							0	0
4	16	62	65	15	86	8	2	5	70	4	68	120	0	1											2							0	0
5	7	62	92	64	65	5	70	4	62	3	24	20	0	46	15	3	6	1							4	50	1					2	4
5	21	62	92	29	70	8	2	4	86	4	55	0	0	14	15	2									10	50	2	76	1			4	0
6	4	62	92	21	70	19	26	10	62	6	44	0	10	220	46	5	2	5	20	1	11	1	15	1	64	50	5	76	2	51	1	1	0
6	19	62	26	25	10	19	92	8	27	6	42	0	0	76	15	4	17	3							18	50	2	51	1	76	1	5	0
7	2	62	26	41	70	14	92	6	62	5	34	0	0	1320	2	8	22	5	15	4	18	3	11	2	140	50	5	76	4			5	0
7	16	62	70	59	26	19	2	3	62	2	17	0	0	0											0							0	0
8	6	62	26	73	70	17	92	2	36	1	7	0	0	848	2	7	9	6	22	6	15	4	17	2	67	50	5	51	1	53	1	2	0
8	20	62	26	66	70	17	92	2	65	2	13	0	0	2400	2	9	15	5	22	5	18	3	17	2	0							0	0
9	17	62	26	58	70	26	58	2	92	2	12	0	0	821	2	7	20	6	4	3	21	3	11	2	0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE-SCHUYLKILL RIVERS
STATION LOCATION SCHUYLKILL RIVER AT
PHILADELPHIA, PENNSYLVANIA 74

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	16	61	10	26	5820	309	151	158	5	24	64	12	5	42	5	16	23	3	16
11	13	61	11	22	5330	312	134	178	1	18	74	9	6	59	0	16	5	7	13
12	21	61	1	6	4600	389	134	255	1	20	68	14	8	44	2	19	8	3	15
2	17	62	3	9	5250	298	139	159	3	21	58	13	6	37	2	24	11	3	19
4	18	62	4	27	5199	180	95	85	5	23	37	9	4	22	2	13	8	1	8
6	20	62	7	1	5570	367	208	159	2	27	69	10	6	48	5	29	17	8	56
8	1	62	8	24	5340	263	155	108	2	23	59	10	5	43	1	20	11	3	37
8	27	62	9	21	5410	357	191	166	2	23	69	6	5	53	5	29	9	2	47
9	21	62	10	9	4740	292	136	156	1	18	49	12	6	30	1	22	10	3	33

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE SCHUYLKILL RIVERS
STATION LOCATION SCHUYLKILL RIVER AT
PHILADELPHIA, PENNSYLVANIA 74

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	22.8	7.6	7.6	1.7	15	-	-	.2	26	80	218	32	25	104	.6	320	7700
10	9	61	19.4	6.1	7.5	.8	8	3.8	6.4	.2	22	77	194	22	20	89	.8	301	3500
10	16	61	17.8	6.3	7.4	1.8	12	2.9	4.6	.2	26	73	260	28	25	163	.7	383	-
10	23	61	16.0	6.5	7.4	-	11	1.8	2.9	.5	31	73	298	23	20	176	.8	399	2900
10	30	61	15.5	6.4	7.4	1.3	13	-	-	.3	28	80	256	11	17	-	4.5	-	4000
11	6	61	17.8	5.1	7.4	1.6	11	-	-	.2	32	74	242	12	10	-	.9	-	1800
11	13	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	700
11	20	61	13.9	8.4	7.5	1.7	12	4.7	5.8	.3	24	70	180	17	8	111	.9	310	1400
11	27	61	11.1	8.9	7.5	1.5	15	5.9	7.3	.3	22	68	152	12	12	88	.8	262	2900
12	4	61	8.9	9.4	7.3	1.7	10	2.0	7.6	.4	19	67	164	12	8	-	.7	247	3300
12	11	61	7.2	8.4	7.4	1.8	13	1.9	7.7	.6	26	78	154	8	7	74	.6	249	580
12	18	61	4.4	9.8	7.4	1.8	15	1.9	4.8	.8	28	69	138	12	7	89	.5	257	2400
12	26	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1300
1	2	62	5.0	12.2	7.5	1.2	8	1.5	2.0	.9	19	60	108	8	7	64	.6	191	1900
1	8	62	3.9	13.0	7.4	4.3	56	3.6	10.8	.4	10	38	78	70	220	46	.3	154	14000
1	15	62	3.9	13.8	7.5	1.9	9	1.6	4.9	.4	12	41	100	7	18	49	.2	157	1200
1	22	62	4.4	11.8	7.4	2.4	10	1.9	-	.5	13	54	106	5	8	61	.4	179	2600
1	29	62	5.6	11.6	7.5	3.4	10	1.0	2.7	.6	14	53	104	7	8	67	.5	205	2400
2	5	62	5.6	11.8	7.5	1.9	13	1.8	4.6	.6	20	57	126	8	8	69	.4	216	4300
2	13	62	3.3	11.7	7.5	1.2	18	.9	3.6	.9	15	58	110	20	8	60	-	194	5000
2	19	62	7.2	10.0	7.5	1.8	14	.7	1.6	.8	27	69	178	15	7	130	.1	324	7200
2	26	62	6.3	11.8	7.3	5.0	34	1.5	2.6	.6	8	33	96	150	170	62	.3	151	12000
3	5	62	5.0	13.1	7.5	1.1	12	2.6	4.9	.6	9	39	80	30	35	45	.2	145	2000
3	12	62	6.7	11.4	7.4	2.2	18	.8	-	.4	11	47	96	46	75	53	.2	175	3700
3	19	62	7.2	11.2	7.5	1.2	12	2.8	4.8	.2	10	43	84	37	35	48	.3	149	4500
3	26	62	10.0	11.2	7.5	1.1	11	2.8	3.8	.2	9	41	74	20	30	45	.4	163	1400
4	2	62	14.4	10.1	7.4	3.0	30	.1	6.9	.2	6	35	80	50	180	40	.3	138	17000
4	9	62	11.7	10.1	7.3	-	16	3.4	3.9	.2	8	44	86	54	60	-	.3	-	6100
4	16	62	9.4	11.2	7.4	-	9	-	-	.1	8	40	70	15	15	-	.3	-	2800
4	23	62	15.6	8.6	7.5	-	10	-	-	.1	14	46	98	20	15	-	.4	-	1300
4	30	62	21.7	6.2	7.5	-	16	-	-	.2	12	57	120	17	15	-	.4	-	330
5	7	62	19.4	7.3	7.5	1.9	13	2.6	4.8	.1	13	60	120	20	10	65	.5	200	1400
5	14	62	18.3	7.7	7.4	1.5	10	2.9	4.8	.2	17	61	176	8	8	124	.5	289	730
5	21	62	25.0	6.3	7.5	.0	12	2.7	4.8	.1	20	65	186	8	8	136	.5	303	2200
5	28	62	25.0	6.2	7.2	2.5	19	3.9	7.3	.2	20	59	162	28	25	105	.5	279	5800
6	4	62	25.6	6.0	7.6	2.2	12	2.7	5.9	.1	18	71	192	18	20	137	.5	337	7200
6	11	62	26.1	7.3	7.7	2.9	17	-	-	.0	19	78	176	20	15	108	.4	322	5200
6	14	62	27.2	7.1	7.7	3.2	10	-	-	.0	16	64	146	46	18	94	.6	258	-
6	18	62	27.2	7.1	7.7	3.2	10	-	-	.0	16	64	146	46	18	94	.6	258	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN DELAWARE SCHUYLKILL RIVERS
STATION LOCATION SCHUYLKILL RIVER AT
PHILADELPHIA, PENNSYLVANIA 74

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	25	62	27.2	6.1	7.5	2.2	10	-	-	.1	20	75	154	33	15	85	.7	277	3800
7	2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	850
7	9	62	27.8	7.1	8.1	4.6	22	-	-	.1	24	86	166	46	25	91	.5	279	3700
7	16	62	26.7	4.3	7.6	4.0	25	-	-	.1	19	87	178	36	15	98	.1	301	970
7	23	62	26.7	5.6	7.7	2.7	16	-	-	.0	22	93	178	38	15	103	1.0	315	970
7	30	62	25.6	5.1	8.4	4.3	26	3.0	6.9	.1	26	94	200	32	15	122	.8	348	-
8	6	62	27.2	6.7	8.0	4.1	23	3.7	9.6	.1	28	84	194	44	18	-	.8	-	-
8	13	62	23.9	4.5	7.3	.2	16	-	-	.2	17	-	106	76	-	53	.5	187	9700
8	20	62	25.6	7.6	7.7	3.6	21	2.9	8.9	.0	21	69	142	46	23	80	.5	250	500
8	27	62	26.1	11.0	8.7	6.4	18	-	-	.1	23	87	168	48	25	99	.7	321	600
9	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4800
9	4	62	26.1	4.7	7.5	-	16	-	-	.2	29	89	162	36	18	-	.7	-	-
9	10	62	23.9	5.2	7.5	2.1	17	2.5	5.9	.0	22	68	172	38	12	115	.7	322	2900
9	17	62	25.0	5.5	7.5	1.8	15	1.9	4.8	.0	27	68	242	38	12	178	.7	422	3700
9	24	62	20.0	5.2	7.3	.9	13	-	-	.1	29	63	232	36	10	190	1.1	436	2300

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Philadelphia, Pennsylvania
Operated by U.S. Geological Survey

STATE	Pennsylvania
MAJOR BASIN	North Atlantic
MINOR BASIN	Delaware-Schuylkill Rivers
STATION LOCATION	Schuylkill River at Philadelphia, Pennsylvania

Day	October	November	December	January	February	March	April	May.	June	July	August	September
1	.300	.382	.744	1.000	1.040	14.700	8.010	1.860	1.530	.478	.198	.181
2	.382	.325	.707	1.000	1.080	7.550	7.390	2.010	1.200	.414	.198	.599
3	.574	.325	.638	.966	1.120	5.160	4.440	2.150	.818	.382	.149	.892
4	.542	.325	.638	.929	1.120	4.040	3.550	2.150	.707	.300	.135	.638
5	.882	.350	.638	.855	1.200	3.500	3.240	1.770	.638	.300	.135	.478
6	.670	.350	.574	2.110	1.450	3.390	3.030	1.590	.868	.275	.135	.542
7	.478	.606	.606	15.700	1.450	3.240	3.610	1.450	1.040	.300	.198	.574
8	.478	1.120	.542	12.300	1.080	2.980	7.400	1.410	.744	.325	.300	.414
9	.478	.855	.446	8.160	1.040	2.930	6.760	1.370	.574	.325	.930	.325
10	.446	.574	.542	5.580	1.080	3.030	7.540	1.370	.510	.235	2.300	.235
11	.382	.446	.542	3.880	.966	4.270	5.760	1.290	.510	.235	2.610	.255
12	.382	.414	1.020	3.080	.818	17.800	5.640	1.290	1.350	.216	1.330	.489
13	.350	.382	1.500	2.640	.892	18.500	8.640	1.240	2.730	.235	.781	.414
14	.414	.478	1.370	2.340	.966	9.350	6.690	1.160	2.540	.235	.606	.275
15	.510	.606	.929	2.390	.966	6.820	5.460	1.120	1.590	.275	.478	.255
16	.478	.638	.700	3.440	1.040	5.640	5.040	1.080	1.160	.300	.382	.235
17	.414	.744	.750	3.410	.966	4.860	4.500	1.040	.929	.275	.478	.275
18	.382	.781	1.500	2.390	.929	4.160	3.990	1.000	.781	.519	.275	.275
19	.350	.707	4.000	2.010	1.200	3.710	3.610	.966	.670	.463	.235	.325
20	.350	.638	3.000	1.910	1.290	3.440	3.340	.892	.638	.300	.255	.414
21	.542	.606	2.200	1.730	1.240	4.030	3.140	.892	.638	.325	.216	.350
22	.670	.574	1.800	1.630	1.240	9.200	2.830	.966	.574	.300	.198	.300
23	.638	.542	1.700	1.770	1.530	6.360	2.640	.818	.510	.275	.216	.300
24	.414	1.220	1.600	1.860	8.600	5.040	2.490	1.260	.752	.325	.181	.275
25	.414	2.200	1.500	1.630	12.600	4.330	2.290	2.260	1.440	.542	.164	.275
26	.446	1.480	1.400	1.540	11.900	3.770	2.100	1.400	.892	.446	.164	.325
27	.414	1.290	1.300	1.590	18.200	3.440	2.010	.966	.744	.235	.151	.574
28	.414	1.160	1.350	2.010	17.700	3.140	1.910	.818	.606	.198	1.050	1.340
29	.382	1.000	1.450	1.680		2.880	1.770	.707	.478	.216	.414	2.590
30	.382	.855	1.240	1.450		2.680	1.770	.744	.414	.216	.638	2.340
31	.350		1.000	1.200		1.590		.707		.216	.275	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE VIRGINIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION SHENANDOAH RIVER AT
BERRYVILLE, VIRGINIA 87

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	12	1	1	3	2	4	2	4	5	9	7	13	9						
10	9	61	10	24	0	1	1	1	1	1	0	4	21	6	21	7						
10	16	61	10	25	0	0	0	1	0	1	1	4	9	6	10	7						
10	23	61	11	6	4	4	1	1	5	4	102	11	34	6	136	12						
10	30	61	11	7	0	0	0	1	0	1	4	4	18	5	22	6						
11	7	61	11	22	0	0	1	1	1	1	2	5	18	7	20	9						
11	14	61	11	28	0	0	0	1	0	1	6	5	18	8	24	9						
11	21	61	11	30	0	0	0	1	0	1	8	4	22	6	30	7						
11	28	61	12	7	0	1	0	1	0	1	22	5	31	6	53	8						
12	5	61	12	14	0	0	0	1	0	1	3	5	38	8	41	9						
12	12	61	12	20	0	1	0	1	0	1	15	5	21	6	36	8						
12	19	61	12	28	1	1	0	1	1	1	45	6	18	5	63	8						
12	27	61	1	11	0	1	0	1	0	1	17	4	14	4	31	6						
1	3	62	1	12	0	1	0	1	0	1	11	4	11	5	22	6						
1	9	62	1	19	3	3	0	1	3	2	59	9	22	5	81	10						
1	16	62	1	24	2	2	0	1	2	2	42	7	27	6	69	9						
1	23	62	1	31	0	1	0	1	0	1	8	5	9	5	17	7						
1	30	62	2	12	0	1	0	1	0	1	8	4	9	5	17	6						
2	6	62	2	19	1	1	1	1	2	1	8	4	16	5	24	7						
2	13	62	2	27	0	0	1	1	1	1	11	4	23	6	34	7						
2	20	62	3	6	0	0	1	1	1	1	15	6	15	7	30	8						
2	27	62	3	14	1	2	0	1	1	2	59	14	37	12	96	18						
3	12	62	3	22	0	1	0	1	0	1	38	5	19	4	57	6						
3	13	62	3	22	3	3	0	1	3	3	96	9	29	5	125	10						
3	20	62	4	2	1	2	0	1	1	2	50	7	12	5	62	9						
3	27	62	4	5	0	1	0	1	0	1	15	5	10	5	25	7						
4	3	62	4	20	2	1	0	0	2	1	39	6	9	5	48	7						
4	10	62	4	27	0	1	0	1	0	1	39	6	16	5	55	7						
4	17	62	4	30	1	1	0	1	1	1	14	5	13	5	27	7						
4	24	62	5	22	0	1	0	1	0	1	5	7	80	10	85	12						
5	1	62	6	4	0	1	0	1	0	1	5	5	15	7	20	8						
5	8	62	6	11	0	0	0	1	0	1	2	5	11	6	13	7						
5	15	62	6	22	0	0	0	0	0	0	8	6	14	9	22	11						
5	23	62	6	27	0	0	0	1	0	1	9	6	12	7	21	9						
5	31	62	7	2	5	4	1	1	6	4	105	19	30	7	135	20						
6	6	62	7	6	0	0	0	1	0	1	2	6	20	8	22	10						
6	13	62	7	16	1	1	1	1	1	1	25	8	8	9	33	12						
6	20	62	7	18	2	2	0	1	2	2	50	9	9	6	59	11						
6	27	62	7	23	0	0	1	1	1	1	6	5	5	7	11	9						
8	1	62	8	17	0	1	0	1	0	1	13	7	16	7	29	10						
8	8	62	8	29	2	2	1	1	3	2	28	8	16	8	44	11						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE VIRGINIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION SHENANDOAH RIVER AT
BERRYVILLE, VIRGINIA

87

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	15	62	8	27	3	3	1	1	4	3	31	14	9	4	40	14						
8	22	62	9	5	0	0	1	1	1	1	7	6	13	8	20	10						
8	29	62	9	11	0	1	0	0	0	1	8	7	3	10	11	12						
9	5	62	9	18	1	1	0	1	1	1	21	9	18	9	39	13						
9	12	62	9	27	0	0	0	1	0	1	18	7	17	9	35	11						
9	19	62	10	15	0	0	0	1	0	1	12	7	14	9	26	11						

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NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE VIRGINIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION SHENANDOAH RIVER AT
BERRYVILLE, VIRGINIA

87

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	400	40	0	0	0	20	0	20	270	0	20																				
10	16	61	4700	60	0	2260	0	120	0	310	1970	150	[illegible]	38	4	42	2	87	2	44	2	88	1	68	1								
11	7	61	800	0	0	210	0	40	0	100	440	40	100																				
11	21	61	2500	0	0	100	0	100	0	1450	850	190	460	68	7	87	2	71	1	92	1												
12	5	61	2500	0	40	0	0	60	0	230	2170	100	500	91	4	92	2	87	2	68	1												
12	19	61	9700	0	60	170	20	100	0	850	8510	190	1970	82	5	92	4	87	3	68	2	69	2	79	2	91	2	81	1	85	1	88	1
1	3	62	200	0	0	20	0	20	0	0	110	0	180																				
1	16	62	7800	0	20	60	0	80	0	730	6890	190	2030	79	4	87	4	88	3	73	3	82	3	92	2	69	2	85	2	91	1		
2	6	62	4300	0	20	0	0	60	0	120	4110	40	460	91	4	92	4	82	2	88	1	87	1										
2	20	62	2300	0	0	20	0	0	20	20	2190	0	680	91	4	92	2																
3	13	62	6000	0	0	20	0	20	0	440	5550	120	3000	82	3	88	3	92	2	79	2	87	2	73	2	81	2	91	1	85	1	84	1
3	20	62	6300	0	0	50	0	20	20	290	5920	140	2850	68	1	82	1																
4	3	62	33500	0	0	210	0	620	660	2770	29230	460	6210	82	6	88	6	79	5	92	5	69	5	81	4	85	3	63	3	51	2	73	2
4	17	62	1900	0	0	20	0	20	0	160	1700	20	1490	82	2	87	2	88	1														
5	8	62	7500	20	150	1160	0	0	420	3880	1840	680	1220	68	5	71	3	38	2	65	2	87	1	69	1	88	1	44	1	92	1	73	1
5	21	62	10100	0	380	3730	0	380	0	3840	1770	1440	2150	68	4	38	4	69	3	71	3	33	3	87	2	30	2	17	2	88	2	57	2
6	6	62	4100	60	0	1490	0	250	0	500	1820	150	350	38	3	73	2	68	1	25	1	79	1	51	1	88	1	69	1	85	1		
6	20	62	11600	150	20	1660	0	770	0	5710	3290	1010	970	68	5	38	3	92	3	79	3	51	2	87	2	82	1	25	1	73	1	57	1
7	6	62	45300	420	6540	9620	0	40	0	12070	16630	7090	13880	79	7	38	6	17	6	88	4	97	3	87	3	40	3	44	3	81	3	69	3
7	18	62	53100	4220	0	26810	0	1450	0	6830	13790	5280	6420	38	7	25	6	79	6	68	6	3	5	31	4	51	4	82	4	97	4	51	4
8	8	62	92400	4350	0	44960	0	1450	0	8490	33140	8690	7450	25	7	38	7	86	7	79	6	68	6	44	6	40	6	3	5	88	5	87	5
8	22	62	68300	2030	1270	35030	0	420	0	10970	18570	4350	3550	38	7	88	7	25	6	40	6	45	5	87	5	3	4	86	4	17	4	79	3
9	5	62	81500	550	0	30340	0	1100	0	26380	23130	19710	14940	38	7	87	6	40	6	86	6	79	5	88	5	26	4	25	3	44	3	51	3
9	19	62	5300	450	230	2880	0	0	0	540	1170	770	2540	38	4	40	2	3	2	68	2	87	2	44	1	88	1	17	1	26	1	79	1

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE VIRGINIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION SHENANDOAH RIVER AT
BERRYVILLE, VIRGINIA 087

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																		
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA						NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	23	21	64	9	65	8	16	6	56	0	0	27	46	1	15	1							0							0	0
10	16	61	65	21	64	15	70	11	23	6	47	0	0	13	15	2									1							3	0
11	7	61	26	17	92	11	65	8	16	7	57	0	0	5											0							1	0
11	21	61	26	29	92	11	64	10	82	6	44	0	0	4											0							1	0
12	5	61	86	49	93	7	64	7	93	7	30	0	0	14	6	1									0							1	0
12	19	61	36	27	62	26	92	17	93	5	25	40	0	8	6	1									0							0	0
1	3	62	64	24	86	12	36	7	16	6	51	20	0	5											0							0	0
1	16	62	16	17	62	15	2	8	64	8	52	0	0	0											0							0	0
2	6	62	86	42	93	28	36	8	62	4	18	40	0	0											0							0	0
2	20	62	86	53	93	18	36	7	71	6	16	20	0	4											0							0	0
3	13	62	36	12	62	10	71	9	92	8	61	120	0	0											0							1	0
3	20	62	36	32	97	18	71	18	62	10	22	160	0	0											0							0	0
4	3	62	36	31	70	15	92	10	16	8	36	40	0	0											0							0	1
4	17	62	36	21	65	11	16	9	92	8	51	20	0	0											0							1	0
5	8	62	62	37	26	6	27	6	64	5	46	20	0	3											0							0	1
5	21	62	62	74	71	11	64	7	16	6	2	0	0	33	15	3									0							0	5
6	6	62	62	26	64	10	16	10	2	8	46	0	0	2											0							0	0
6	20	62	62	31	26	20	92	12	15	7	30	0	0	1											0							0	0
7	6	62	15	26	62	25	26	13	16	10	26	0	0	0											0							0	0
7	18	62	62	48	15	15	26	10	16	6	21	40	0	784	22	6	2	6	15	5	18	2	11	2	224	50	5	76	4			8	2
8	8	62	53	29	62	13	15	11	26	10	37	0	0	2											0							0	0
8	22	62	70	33	23	19	64	9	27	6	33	0	0	70	15	3	2	3	22	1					0							6	0
9	5	62	26	18	64	15	53	13	23	9	45	0	0	87	20	4	2	3							6	76	1	50	1			2	1
9	19	62	26	37	64	8	82	7	16	6	42	0	0	6											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE	VIRGINIA
MAJOR BASIN	NORTH ATLANTIC
MINOR BASIN	POTOMAC RIVER
STATION LOCATION	SHENANDOAH RIVER AT BERRYVILLE, VIRGINIA

87

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	2	61	11	21	5760	143	78	65	2	30	23	4	3	16	0	2	2	2	17
12	5	61	12	18	4000	259	154	105	5	89	25	2	2	21	0	5	3	9	18
1	3	62	1	9	3780	175	73	102	6	28	18	3	2	12	1	4	2	3	12
1	30	62	2	6	4282	185	93	92	6	45	19	2	1	15	1	4	2	7	10
2	27	62	3	12	2787	152	55	97	4	16	16	3	1	12	0	5	2	1	11
3	27	62	4	3	2233	150	52	98	5	17	15	3	1	10	1	4	2	2	7
4	24	62	5	1	852	224	82	142	7	31	21	5	2	14	0	5	3	4	11
5	22	62	5	31	3918	134	65	69	8	25	18	2	1	13	2	5	3	1	5
6	27	62	7	5	5043	157	100	57	2	26	28	3	2	22	1	6	2	3	33
7	25	62	8	3	2121	196	117	79	5	40	39	6	2	30	1	8	4	4	17
8	7	62	8	15	4548	191	122	69	3	50	23	3	2	16	2	7	3	6	30
8	29	62	9	5	1765	449	286	163	9	80	54	4	4	41	5	17	6	9	111
9	26	62	10	3	3597	282	200	82	6	126	30	4	2	24	0	8	4	10	16

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE VIRGINIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION SHENANDOAH RIVER AT
BERRYVILLE, VIRGINIA 87

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	20.2	5.7	9.4	-	-	-	-	-	10	128	160	5	22	-	-	250	-
10	9	61	19.0	7.9	8.4	-	-	-	-	-	9	136	160	5	22	-	-	232	4700
10	16	61	16.0	8.5	8.4	-	-	-	-	-	13	140	180	5	9	-	-	246	7100
10	23	61	16.3	-	8.1	-	-	-	-	-	4	82	112	15	450	-	-	144	23000
10	30	61	14.0	8.7	8.0	-	-	-	-	-	4	100	136	5	15	-	-	130	-
11	7	61	17.0	7.5	8.3	-	-	-	-	-	7	126	168	5	9	48	-	-	330
11	14	61	15.0	9.5	8.6	-	-	-	-	-	7	140	176	5	15	-	-	234	*40
11	21	61	14.0	10.0	8.7	-	-	-	-	-	6	124	152	2	7	-	-	246	*18
11	28	61	9.0	10.2	9.0	-	-	-	-	-	9	132	176	5	22	60	.1	210	33
12	5	61	10.8	11.4	8.8	-	-	1.3	2.6	-	7	120	150	2	10	49	.0	206	12
12	11	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
12	12	61	8.0	11.2	9.1	-	7	.8	2.4	-	9	116	152	2	3	52	.1	200	-
12	19	61	6.0	11.7	8.2	-	-	1.6	8.5	-	6	72	120	3	125	-	-	132	-
12	27	61	5.5	13.1	8.3	-	-	2.0	2.9	-	5	82	102	5	9	27	.0	130	250
1	3	62	3.0	13.6	8.5	-	-	-	-	-	5	116	142	2	12	-	-	192	18
1	9	62	7.8	11.8	8.2	-	36	.2	-	-	6	86	110	8	550	-	-	134	20
1	16	62	2.0	13.6	8.3	-	-	.7	5.6	-	5	96	120	5	130	25	-	142	*1
1	23	62	3.5	13.2	8.4	-	-	1.7	3.1	-	7	102	130	2	20	31	-	162	4
1	30	62	3.6	13.0	8.5	-	-	1.1	2.7	-	6	116	140	5	15	34	-	178	5
2	6	62	2.0	13.4	8.6	-	7	.9	3.5	-	9	115	146	2	15	-	-	194	1
2	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-	-
2	13	62	4.0	-	8.7	-	-	.5	2.6	-	11	120	149	5	9	55	-	194	78
2	20	62	4.8	-	8.0	-	-	2.1	2.2	-	11	122	154	5	20	-	-	198	-
2	27	62	6.5	10.8	8.2	2.7	-	4.4	-	-	6	86	118	5	280	-	-	146	190
3	13	62	4.5	12.6	8.0	5.0	28	2.7	-	-	-	65	92	15	230	-	-	-	-
3	20	62	7.0	11.8	8.1	.8	-	2.4	-	-	8	72	96	7	50	-	-	120	170
3	27	62	7.5	10.7	7.9	.2	-	1.8	5.4	-	3	70	92	5	75	-	-	122	61
4	3	62	12.0	10.2	8.0	2.3	49	4.5	10.5	-	4	92	118	5	365	22	-	120	*24
4	10	62	12.5	9.8	8.0	.9	-	2.6	6.1	-	2	82	106	5	100	17	-	128	48
4	17	62	8.5	11.2	8.1	.6	-	1.5	4.5	-	3	72	92	3	50	-	-	121	5
4	24	62	13.0	10.0	8.4	-	-	1.1	2.6	-	7	100	116	2	25	26	.0	150	*1
5	1	62	20.0	-	8.7	-	13	.8	3.5	-	6	112	132	5	40	29	-	160	-
5	8	62	17.8	8.9	8.6	-	-	1.5	3.5	-	4	92	110	5	25	27	-	136	*1
5	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*1
5	15	62	18.0	9.2	9.0	-	-	1.2	4.0	-	4	108	128	5	28	-	-	160	13
5	23	62	23.8	7.4	8.7	1.2	-	1.3	4.4	-	-	106	128	-	30	-	-	-	25
5	31	62	21.8	6.3	8.0	3.6	33	6.8	-	-	-	100	132	-	270	-	-	-	-
6	6	62	22.0	7.3	8.4	1.4	-	1.8	-	-	7	120	132	10	25	28	.1	163	-
6	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	200	*7

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE VIRGINIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION SHENANDOAH RIVER AT
BERRYVILLE, VIRGINIA

87

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	20	62	24.8	6.6	8.3	3.8	-	3.1	8.1	-	8	116	152	10	25	34	.1	163	1600
6	27	62	24.5	7.7	8.3	2.7	-	.6	8.1	-	8	120	144	10	-	32	-	190	-
7	6	62	22.5	8.1	8.1	-	24	3.6	-	-	-	-	-	-	-	-	-	-	-
7	13	62	23.3	6.0	7.9	2.8	-	2.6	6.9	-	10	124	144	10	-	39	.0	186	-
7	25	62	-	-	8.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	1	62	-	-	-	-	-	-	-	-	9	128	140	-	-	18	.2	172	-
8	8	62	25.5	7.7	8.6	6.7	-	2.6	9.7	-	13	138	172	-	-	58	.0	227	*7
8	15	62	24.5	12.6	8.5	5.6	-	3.1	12.3	-	20	104	180	5	-	47	.0	226	300
8	22	62	25.0	7.7	8.6	3.7	-	1.8	8.3	-	10	136	164	10	-	54	.0	239	*7
8	29	62	-	-	8.6	-	-	1.6	7.2	-	13	144	168	10	-	64	.0	243	300
9	5	62	-	-	8.2	-	-	2.8	8.5	-	18	104	172	5	65	64	.1	275	10
9	12	62	22.0	7.7	8.5	4.7	-	1.9	9.1	-	16	124	160	10	25	66	.1	247	60
9	19	62	19.4	8.5	8.8	6.0	-	1.7	5.4	-	16	124	160	10	25	66	.0	260	*3
9	26	62	-	-	8.6	-	-	1.3	4.5	-	-	-	-	-	-	-	-	-	30

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Millville, West Virginia
Operated by U.S. Geological Survey

STATE Virginia

MAJOR BASIN North Atlantic

MINOR BASIN Potomac River

STATION LOCATION Shenandoah River at
Berryville, Virginia

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.534	1.040	1.310	2.120	1.670	10.900	5.450	2.460	1.810	1.210	.706	.548
2	.528	.990	1.220	2.050	1.660	8.590	7.430	3.070	1.760	1.080	.698	.509
3	.554	.990	1.090	1.890	1.620	6.650	8.140	4.980	1.790	1.160	.706	.554
4	.574	.936	1.060	1.860	1.600	5.410	7.020	5.110	1.600	1.280	.730	.580
5	.554	.909	1.040	1.840	1.590	4.670	6.040	4.310	2.660	1.400	.658	.629
6	.560	.972	.972	2.000	1.350	4.570	5.360	3.540	2.540	1.420	.666	.658
7	.580	1.080	.909	4.090	1.400	4.290	5.050	3.120	2.100	1.590	.698	.666
8	.580	1.190	.945	10.600	1.500	3.950	5.490	2.860	2.010	1.510	.762	.706
9	.580	1.150	.909	10.100	1.460	3.610	7.110	2.640	1.790	1.180	.865	.572
10	.554	1.760	.927	6.890	1.390	3.360	8.060	2.480	1.500	1.140	.794	.560
11	.534	1.540	.954	5.090	1.350	3.310	7.230	2.410	1.410	1.310	.722	.504
12	.522	1.290	1.040	3.950	1.370	4.580	6.530	2.280	1.430	1.360	.828	.448
13	.503	1.230	1.780	3.250	1.380	14.000	7.890	2.190	1.540	1.200	.945	.528
14	.528	1.200	3.650	3.080	1.370	25.000	9.450	2.180	3.180	1.060	.738	.572
15	.515	1.090	3.970	2.900	1.400	21.000	8.820	2.220	2.980	.999	.690	.467
16	.528	1.080	2.980	2.900	1.450	16.300	7.470	2.320	2.880	1.110	.636	.440
17	.522	1.040	2.500	2.910	1.460	13.900	6.400	2.200	2.390	1.090	.629	.473
18	.503	1.030	2.480	3.140	1.500	12.800	5.560	2.240	2.070	1.010	.706	.485
19	.509	.999	5.490	2.700	1.520	11.700	4.940	2.460	1.600	1.160	.690	.497
20	.503	.945	9.570	2.500	1.580	10.600	4.550	2.240	1.760	1.090	.629	.509
21	.528	.945	6.710	2.350	1.730	11.800	4.290	2.050	1.880	.990	.682	.503
22	2.320	1.100	4.960	2.250	2.160	21.900	3.990	2.050	2.740	.936	.615	.515
23	9.920	.936	3.890	2.180	2.030	26.800	3.630	2.150	2.310	.855	.594	.515
24	4.660	.999	3.330	2.150	2.110	17.800	3.330	2.110	2.020	.927	.601	.491
25	2.960	1.040	2.880	2.090	2.830	12.800	3.090	1.850	1.520	.846	.650	.515
26	2.160	1.010	2.600	2.100	3.160	10.400	2.910	1.670	2.060	.837	.682	.497
27	1.790	1.290	2.320	2.020	7.030	8.650	2.770	1.920	1.740	.802	.615	.528
28	1.540	1.660	2.190	1.900	10.400	7.460	2.640	2.970	1.340	.778	.587	.534
29	1.360	1.540	2.220	1.860		6.510	2.520	2.540	1.390	.714	.567	.522
30	1.220	1.400	2.250	1.790		5.820	2.450	2.180	1.390	.978	.509	.548
31	1.100		2.280	1.730		5.340		2.010		.690	.491	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ALASKA
MAJOR BASIN ALASKA
MINOR BASIN NORTH PACIFIC OCEAN
STATION LOCATION SHIP CREEK AT
ANCHORAGE, ALASKA 110

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
6	7	62	1400	0	0	20	0	0	20	230	1160	60	80	82	2	73	1																
7	6	62	100	0	0	0	0	0	0	0	60	0	0																				
7	19	62	100	0	0	0	0	0	0	0	70	0	20																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ALASKA
MAJOR BASIN ALASKA
MINOR BASIN NORTH PACIFIC OCEAN
STATION LOCATION SHIP CREEK AT
ANCHORAGE, ALASKA 110

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
6	7	62	37	23	16	9	2	9	92	8	51	0	0	0											0							0	0
7	6	62	37	19	92	16	2	6	14	5	54	0	0	2											1							0	0
7	19	62	14	33	92	25	31	9	37	7	26	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE ALASKA
MAJOR BASIN ALASKA
MINOR BASIN NORTH PACIFIC OCEAN
STATION LOCATION SHIP CREEK AT
ANCHORAGE, ALASKA 110

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
11	10	61	12	1	1	1	0	1	1	1	3	9	12	10	15	13						
11	10	61	12	1	0	0	0	1	0	1	3	4	4	5	7	6						
3	21	62	4	3	0	1	0	0	0	1	2	4	6	4	8	6						
4	5	62	5	1	3	6	0	2	3	6	63	15	0	7	63	17						
6	7	62	7	9	0	0	0	1	0	1	2	5	4	5	6	7						
6	21	62	8	3	0	1	0	0	0	1	0	7	2	7	2	10						
7	5	62	8	10	0	0	0	0	0	0	1	3	6	3	7	4						
7	19	62	8	21	1	1	0	1	1	1	3	5	10	6	13	7						
8	2	62	9	19	0	1	0	1	0	1	2	6	6	7	8	9						
8	16	62	9	6	0	1	0	1	0	1	4	5	5	6	9	7						

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ALASKA
MAJOR BASIN ALASKA
MINOR BASIN NORTH PACIFIC OCEAN
STATION LOCATION SHIP CREEK AT
ANCHORAGE, ALASKA 110

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	7	62	-	-	8.0	-	-	-	-	-	5	42	80	10	*25	20	.0	-	-
6	21	62	-	-	7.8	-	-	-	-	-	4	32	48	5	*25	20	.0	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Anchorage, Alaska
Operated by U.S. Geological Survey

STATE	Alaska
MAJOR BASIN	Alaska
MINOR BASIN	North Pacific Ocean
STATION LOCATION	Ship Creek at Anchorage, Alaska

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.560	.100	.061	.027	.033	.019	.024	.026	.320	.660	.186	.155
2	.576	.100	.060	.028	.032	.019	.023	.030	.320	.600	.180	.143
3	.540	.098	.059	.029	.031	.018	.028	.035	.320	.552	.178	.197
4	.484	.096	.059	.031	.030	.018	.027	.038	.340	.540	.180	.186
5	.423	.096	.058	.034	.029	.018	.026	.044	.320	.572	.165	.169
6	.386	.097	.058	.028	.028	.018	.026	.053	.330	.568	.155	.155
7	.366	.098	.058	.034	.028	.018	.026	.062	.380	.552	.153	.153
8	.346	.099	.058	.034	.028	.019	.026	.077	.360	.498	.159	.141
9	.295	.100	.058	.034	.028	.019	.025	.126	.410	.480	.153	.134
10	.254	.100	.058	.034	.027	.020	.024	.108	.460	.452	.143	.124
11	.234	.100	.059	.034	.026	.020	.019	.128	.600	.396	.141	.119
12	.267	.110	.060	.034	.025	.019	.018	.110	.800	.346	.139	.117
13	.254	.110	.060	.033	.024	.019	.019	.108	1.200	.310	.139	.117
14	.238	.110	.061	.033	.024	.018	.019	.096	1.000	.295	.141	.110
15	.226	.110	.060	.032	.024	.018	.019	.101	.850	.280	.137	.110
16	.217	.110	.058	.032	.025	.017	.018	.115	.940	.259	.132	.110
17	.215	.110	.054	.032	.025	.017	.020	.128	1.000	.261	.126	.101
18	.199	.100	.050	.032	.025	.017	.020	.117	1.100	.267	.124	.096
19	.195	.094	.047	.032	.025	.014	.020	.117	.880	.264	.124	.096
20	.195	.087	.045	.033	.026	.018	.023	.134	.900	.275	.134	.105
21	.197	.082	.042	.033	.021	.018	.026	.165	.920	.270	.130	.122
22	.184	.075	.039	.034	.021	.018	.030	.160	.980	.248	.126	.119
23	.178	.075	.037	.034	.022	.018	.030	.157	.850	.229	.124	.165
24	.153	.072	.036	.035	.014	.018	.036	.182	.680	.213	.121	.176
25	.153	.071	.034	.035	.017	.018	.037	.201	.650	.224	.122	.159
26	.155	.070	.033	.023	.021	.018	.035	.256	.628	.213	.153	.147
27	.136	.068	.031	.010	.020	.019	.032	.264	.600	.201	.157	.139
28	.147	.065	.029	.025	.019	.020	.029	.236	.664	.199	.161	.132
29	.139	.063	.028	.020		.021	.024	.240	.636	.206	.195	.126
30	.108	.062	.027	.025		.022	.023	.256	.664	.204	.201	.121
31	.103		.027	.030		.023		.290		.197	.176	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE WASHINGTON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN MIDDLE AND LOWER SNAKE RIVER

STATION LOCATION SNAKE RIVER AT

ICE HARBOR DAM, WASHINGTON 115

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
NO.	DAY	YR.	NO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	NO.	DAY	μμc/g	±	μμc/g	±
5	25	62	6	29	0	0	0	1	0	1	2	7	10	6	12	9						
6	5	62	7	5	0	0	1	1	1	1	6	5	20	6	26	7						
6	11	62	7	13	1	1	0	0	1	1	3	5	9	6	12	7						
6	18	62	7	18	0	1	0	1	0	1	4	5	10	6	14	7						
6	25	62	7	25	0	1	0	0	0	1	4	6	10	5	14	7						
7	23	62	8	21	0	0	1	1	1	1	3	5	18	6	21	7						
8	7	62	8	27	0	1	1	1	1	1	2	3	6	3	8	4						
8	13	62	8	31	0	0	1	1	1	1	4	5	9	7	13	9						
8	20	62	9	6	0	0	2	1	2	1	2	5	15	7	17	9						
8	27	62	9	14	0	0	1	1	1	1	0	6	7	8	7	10						
9	5	62	9	24	1	1	3	1	4	1	1	4	23	7	24	8						
9	10	62	10	3	0	0	2	1	2	1	3	6	8	7	11	9						
9	17	62	10	16	0	0	1	1	1	1	3	5	13	7	16	8						
9	25	62	10	23	0	0	2	1	2	1	3	5	16	7	19	9						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION SNAKE RIVER AT
ICE·HARBOR DAM, WASHINGTON 115

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
5	25	62	1200	0	0	20	0	0	0	700	440	40	420	71	3																		
6	18	62	1200	0	0	40	0	40	0	560	580	40	150	71	2																		
7	2	62	800	0	0	0	0	0	0	720	130	170	420	71	3																		
7	16	62	700	20	0	90	0	0	0	410	200	1060	110	71	1	68	1																
8	14	62	1900	0	0	0	0	0	0	1140	800	970	760	71	2	68	2	92	1														
8	20	62	1100	80	0	130	0	0	0	590	300	420	80	69	2	71	1	84	1														
9	4	62	1000	80	0	230	0	100	150	210	250	40	250	92	1																		
9	17	62	400	0	0	220	0	20	0	40	80	40	190	26	1																		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE	WASHINGTON
MAJOR BASIN	PACIFIC NORTHWEST
MINOR BASIN	MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION	SNAKE RIVER AT
	ICE HARBOR DAM, WASHINGTON 115

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
5	25	62	80	57	58	4	92	4	14	3	32	60	0	5	11	1									0							0	0
6	18	62	80	54	36	13	92	8	14	4	21	0	0	8	11	1									3							0	0
7	2	62	80	35	56	17	47	9	36	4	35	0	0	0											0							0	0
7	16	62	30	24	56	22	80	16	26	11	27	0	0	10	21	1									1							1	0
8	14	62	58	28	47	18	80	17	26	12	25	0	0	89	17	4	16	3							12	51	3					0	0
8	20	62	58	57	47	26	80	11	92	4	2	0	0	105	22	3	16	3	17	3	18	1			37	53	3	76	3	51	2	0	0
9	4	62	58	25	92	25	47	25	26	10	15	0	0	27	17	2	11	1							12	50	3					0	0
9	17	62	92	46	58	13	47	13	56	7	21	0	0	28	11	2	16	1							9	50	2	76	1			0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE WASHINGTON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN MIDDLE AND LOWER SNAKE RIVER

STATION LOCATION SNAKE RIVER AT
ICE HARBOR DAM, WASHINGTON 115

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES											
BEGINNING			END								NEUTRALS									
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
6	5	62	6	13	4988	110	49	61	1	12	14	1	1	11	1	5	3	1	13
7	12	62	7	18	4753	92	33	59	1	8	11	1	1	9	0	3	2	0	6
8	6	62	8	13	4862	126	58	68	1	14	15	1	1	13	0	5	3	1	18
9	3	62	9	10	4424	106	34	72	1	10	13	1	1	10	1	4	2	1	3

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION SNAKE RIVER AT
ICE HARBOR DAM, WASHINGTON 115

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
5	25	62	-	-	-	-	-	-	-	-	-	-	-	10	25	8	-	-	-
7	16	62	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-
7	30	62	-	-	-	-	-	-	-	-	6	56	56	5	25	16	.0	83	-
8	7	62	-	-	-	-	-	-	-	-	6	72	24	5	25	20	.0	130	-
8	13	62	-	-	-	-	22	-	-	-	7	76	80	5	-	25	.0	142	-
8	20	62	-	-	-	-	-	-	-	-	9	84	80	5	-	30	.1	152	-
8	27	62	-	-	-	-	-	-	-	-	9	90	88	0	-	31	.0	128	-
9	4	62	-	-	-	-	-	-	-	-	14	100	104	5	25	37	.0	175	-
9	10	62	-	-	-	-	-	-	-	-	14	100	96	5	25	37	.0	188	-
9	17	62	-	-	-	-	-	-	-	-	17	112	104	10	*25	42	.0	208	-
9	25	62	-	-	-	-	-	-	-	-	20	88	204	5	25	165	.1	425	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Clarkston, Washington
Operated by U.S. Geological Survey

STATE Washington

MAJOR BASIN Pacific Northwest

MINOR BASIN Middle and Lower Snake River

STATION LOCATION Snake River at

Ice Harbor Dam, Washington

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	19.900	22.300	26.000	25.400	28.000	34.700	52.500	78.600	116.000	59.700	25.200	21.200
2	19.100	22.500	28.600	23.500	30.000	34.100	58.500	74.900	120.000	56.500	25.500	22.000
3	18.800	23.500	28.000	26.400	30.000	31.700	63.700	77.600	122.000	51.800	24.200	19.200
4	18.500	22.700	28.200	26.400	27.600	27.300	66.800	81.800	126.000	47.400	23.600	18.900
5	18.000	22.700	29.000	27.600	27.000	25.000	76.500	87.000	114.000	45.400	23.800	21.600
6	18.500	22.200	30.000	26.000	29.900	30.000	89.200	86.800	107.000	43.500	23.200	20.300
7	19.000	21.300	28.900	27.700	31.000	28.100	117.000	87.500	95.800	42.300	23.100	20.500
8	19.500	21.800	28.400	45.800	31.700	27.100	118.000	93.700	85.000	40.200	26.600	19.200
9	19.900	21.500	28.000	66.800	30.700	26.900	95.600	108.000	87.100	35.400	28.200	18.600
10	19.200	22.000	25.900	50.900	31.000	30.300	81.600	121.000	95.600	34.200	28.300	17.600
11	22.000	22.400	22.000	41.800	29.000	25.300	71.000	124.000	99.300	35.000	27.000	19.500
12	24.100	22.800	23.600	38.000	31.500	23.600	61.000	119.000	106.000	34.600	24.600	19.800
13	23.300	22.400	21.700	37.300	34.200	26.900	59.000	117.000	107.000	30.600	21.800	23.900
14	25.800	22.400	22.800	32.400	35.300	26.500	62.800	114.000	108.000	31.800	23.100	21.100
15	25.700	21.900	23.900	30.100	37.800	28.600	73.600	107.000	108.000	32.700	23.400	20.500
16	23.500	21.700	23.700	30.700	40.000	28.100	83.000	100.000	103.000	32.400	23.000	18.800
17	23.600	20.700	20.900	32.500	40.400	29.500	88.000	91.000	101.000	31.500	20.500	18.900
18	23.500	20.100	21.000	30.400	42.200	26.700	95.600	91.900	102.000	29.700	20.400	20.200
19	23.200	18.800	20.900	30.600	42.600	27.000	107.000	95.300	102.000	29.100	18.900	22.200
20	22.900	18.800	21.200	28.300	44.400	33.700	126.000	96.000	100.000	29.000	18.900	20.800
21	23.000	20.800	22.200	26.800	46.800	35.100	132.000	91.800	97.700	28.800	19.200	20.500
22	22.300	22.500	26.800	24.000	47.600	37.300	115.000	88.900	95.600	26.600	19.800	19.400
23	21.800	22.800	25.000	24.700	46.700	37.200	100.000	89.000	93.000	26.000	19.100	18.900
24	23.600	22.000	25.500	28.200	42.500	33.500	104.000	98.500	87.500	25.400	19.500	19.300
25	25.500	23.400	24.400	29.400	39.000	40.800	116.000	126.000	83.400	25.100	18.800	23.300
26	25.700	25.500	22.900	28.000	37.500	49.900	114.000	136.000	87.400	24.600	17.700	25.700
27	26.000	22.800	23.800	30.400	33.700	71.200	106.000	130.000	79.500	24.500	17.800	26.000
28	29.100	23.500	24.200	28.200	33.400	77.000	103.000	130.000	73.200	24.700	18.000	23.700
29	28.500	24.600	25.600	26.300		70.000	93.200	135.000	68.000	24.800	19.300	24.000
30	25.300	24.800	25.000	29.900		59.500	84.800	126.000	62.700	24.800	21.500	26.300
31	24.200		26.300	29.800		54.600		119.000		24.900	21.500	

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION SNAKE RIVER AT
WAWAWAI, WASHINGTON 49

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	10	61	10	18	2460	169	47	122	1	10	21	4	2	14	1	5	2	1	7
12	4	61	12	18	1890	174	48	126	1	10	20	4	4	11	1	6	2	1	8
1	16	62	1	19	810	*	-	-	-	-	-	-	-	-	-	-	-	-	-

* LOW FLOW - NOT PROCESSED

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION SNAKE RIVER AT
WAWAWAI, WASHINGTON 49

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	30	-	-	-	-	-	-	0	5	19	8	19	9						
10	9	61	10	27	-	-	-	-	-	-	2	5	12	7	14	9						
10	16	61	10	31	-	-	-	-	-	-	0	4	17	6	17	7						
10	23	61	11	6	0	1	1	1	1	1	7	5	16	5	23	7						
10	30	61	11	14	-	-	-	-	-	-	11	5	26	8	37	9						
11	6	61	11	21	-	-	-	-	-	-	7	6	29	8	36	10						
11	13	61	11	30	-	-	-	-	-	-	3	5	11	7	14	9						
11	20	61	12	5	-	-	-	-	-	-	9	6	12	8	21	10						
11	27	61	12	19	-	-	-	-	-	-	13	4	22	6	35	7						
12	4	61	12	18	-	-	-	-	-	-	5	5	20	7	25	9						
12	11	61	12	19	-	-	-	-	-	-	14	6	30	8	44	10						
12	18	61	1	2	0	1	2	1	2	1	12	6	15	7	27	9						
1	2	62	1	12	0	1	3	2	3	2	21	5	25	6	46	8						
1	8	62	1	22	-	-	-	-	-	-	26	6	24	7	50	9						
1	15	62	1	29	-	-	-	-	-	-	9	5	22	6	31	8						
1	22	62	2	6	0	1	3	2	3	3	4	4	13	6	17	7						
1	29	62	2	13	-	-	-	-	-	-	9	6	9	7	18	9						
2	5	62	2	19	-	-	-	-	-	-	7	5	15	7	22	9						
2	12	62	2	21	-	-	-	-	-	-	31	6	22	7	53	9						
2	19	62	3	6	-	-	-	-	-	-	4	6	0	7	4	9						
2	26	62	3	13	0	1	2	2	2	2	6	4	17	6	23	7						
3	5	62	3	20	-	-	-	-	-	-	11	5	18	7	29	9						
3	12	62	3	28	-	-	-	-	-	-	11	6	16	7	27	9						
3	19	62	4	5	-	-	-	-	-	-	7	6	18	7	25	9						
3	26	62	4	10	3	1	1	1	4	1	33	6	13	5	46	8						
4	2	62	4	19	-	-	-	-	-	-	12	5	14	5	26	7						
4	7	62	4	26	-	-	-	-	-	-	21	7	17	6	38	9						
4	16	62	5	23	-	-	-	-	-	-	6	7	1	7	7	10						
4	23	62	5	28	0	1	0	0	0	1	12	5	15	6	27	7						
4	30	62	6	4	-	-	-	-	-	-	2	7	12	7	14	10						
5	7	62	6	19	-	-	-	-	-	-	11	8	11	7	22	11						
5	14	62	6	26	-	-	-	-	-	-	7	6	15	7	22	9						
5	21	62	6	26	-	-	-	-	-	-	6	5	15	6	21	8						
5	28	62	6	29	1	1	0	1	1	1	2	5	15	6	17	7						
6	4	62	7	5	-	-	-	-	-	-	8	6	16	6	24	8						
6	11	62	7	16	-	-	-	-	-	-	6	5	11	7	17	9						
6	18	62	7	18	-	-	-	-	-	-	8	5	22	7	30	8						
6	25	62	8	6	0	0	1	0	1	0	7	6	7	6	14	8						
7	2	62	8	3	-	-	-	-	-	-	2	6	8	7	10	9						
7	9	62	9	30	-	-	-	-	-	-	7	6	3	6	10	8						
7	16	62	8	3	-	-	-	-	-	-	2	4	13	5	15	6						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION SNAKE RIVER AT
WAWAWAI, WASHINGTON 49

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
7	23	62	8	21	0	1	0	1	0	1	7	6	9	6	16	8						
7	30	62	8	28	-	-	-	-	-	-	1	2	7	5	8	5						
8	6	62	8	27	-	-	-	-	-	-	1	2	8	3	9	3						
8	13	62	8	31	-	-	-	-	-	-	3	5	15	7	18	9						
8	20	62	10	6	-	-	-	-	-	-	5	5	17	7	22	9						
8	27	62	9	13	0	0	2	1	2	1	2	6	19	9	21	11						
9	4	62	10	3	-	-	-	-	-	-	1	5	15	7	16	8						
9	10	62	10	9	-	-	-	-	-	-	9	6	18	9	27	11						
9	17	62	10	15	-	-	-	-	-	-	1	5	13	6	14	7						
9	24	62	10	22	0	0	1	1	1	1	1	3	12	4	13	5						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION SNAKE RIVER AT
WAWAWAI, WASHINGTON 49

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	1200	0	0	0	0	20	0	210	930	0	350	87	1	88	1	92	1														
10	16	61	1000	0	0	190	0	0	20	150	620	20	310																				
11	6	61	1000	0	20	40	0	20	0	170	730	0	250	88	1																		
11	20	61	1300	160	20	50	0	0	50	290	720	20	560	88	1	71	1	87	1														
12	4	61	1100	0	0	20	0	20	0	100	990	100	370	88	1																		
12	5	61	100	0	0	0	0	0	0	0	120	0	60																				
12	18	61	1100	0	0	70	0	50	0	160	810	90	90	88	1																		
1	2	62	1100	0	0	0	0	0	0	120	950	60	190	82	1	92	1																
1	15	62	900	0	50	50	20	50	0	50	650	90	160																				
2	5	62	1400	50	0	20	0	90	70	270	860	180	230	77	1																		
2	19	62	6300	930	40	150	0	500	150	2280	2260	1120	350	71	4	3	3	51	2	92	2	82	1	87	1	73	1	97	1	88	1		
3	5	62	1700	0	0	100	0	20	0	1180	410	930	250	71	3																		
3	19	62	1400	0	0	0	0	0	0	340	1020	140	230	87	1	71	1	92	1	88	1												
4	2	62	2300	0	0	90	0	760	20	760	650	1300	670	71	3	57	2	77	1	52	1												
4	16	62	1100	0	0	80	0	130	20	230	630	360	1160	71	1																		
5	7	62	3300	0	0	0	0	0	0	1700	1620	210	290	71	4	88	1	73	1	92	1	97	1										
5	21	62	600	0	0	0	0	0	0	380	230	110	950	71	2																		
6	4	62	1100	0	0	20	0	0	0	510	570	40	1330	71	2																		
6	18	62	1100	0	20	0	40	0	0	150	910	20	230	82	1																		
7	2	62	1100	0	0	80	0	0	0	510	550	130	420	71	2																		
7	16	62	1400	0	0	20	0	0	0	420	970	0	460	82	1	71	1	92	1	68	1												
8	6	62	1300	0	0	0	0	0	0	290	1040	120	370	92	2	82	1	68	1														
8	20	62	3600	0	0	130	0	0	0	2110	1350	0	720	69	4	68	2	92	2	71	1	82	1	88	1								
9	4	62	1800	170	0	210	0	120	0	170	1160	120	250	92	2	3	1																
9	17	62	300	10	0	60	0	10	0	70	190	60	890																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WASHINGTON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN MIDDLE AND LOWER SNAKE RIVER

STATION LOCATION SNAKE RIVER AT

WAWAWAI, WASHINGTON 049

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																		NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														ROTIFERS											CRUSTACEA								
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	92	17	64	15	36	11	70	8	49	0	0	20	46	1									0							2	2
10	16	61	92	15	58	15	36	9	70	9	52	60	0	4											0							0	0
11	6	61	2	12	70	11	92	9	36	9	59	40	0	3											0							1	1
11	20	61	71	9	36	9	2	8	65	7	68	160	0	4											0							1	0
12	4	61	36	12	71	9	70	7	46	7	65	0	0	0											0							0	0
12	5	61	62	25	47	15	95	13	2	7	40	0	0	4											0							0	0
12	18	61	36	13	80	9	71	8	70	8	62	70	0	0											0							0	0
1	2	62	36	19	92	14	56	6	93	5	56	0	0	2											0							0	0
1	15	62	92	10	36	10	65	6	76	5	69	200	0	2											0							1	0
2	5	62	36	13	9	9	70	7	71	6	65	0	0	3											0							0	0
2	19	62	36	9	97	8	82	8	92	7	68	150	0	0											0							0	0
3	5	62	82	27	71	8	47	8	92	7	50	0	0	0											0							0	0
3	19	62	92	14	65	11	71	7	36	7	61	50	0	0											0							0	0
4	2	62	82	20	92	11	9	6	14	5	58	0	0	10											0							0	0
4	16	62	80	29	92	13	14	6	97	5	47	0	0	41	11	3	2	2							0							0	1
5	7	62	80	45	2	7	14	6	92	4	38	20	0	3											0							1	0
5	21	62	80	28	14	10	2	9	92	4	49	0	0	1											0							0	0
6	4	62	80	37	36	7	92	5	14	4	47	0	0	0											0							0	0
6	18	62	36	20	92	12	52	10	80	8	50	0	0	1											1							0	0
7	2	62	2	15	80	8	56	7	65	6	64	110	0	2											0							0	0
7	16	62	36	19	92	16	80	9	26	7	49	0	0	1											0							0	0
8	6	62	92	20	47	15	36	12	58	8	45	0	0	9											0							0	0
8	20	62	58	46	92	10	45	10	36	7	27	0	0	17	11	1									0							0	0
9	4	62	92	40	47	13	58	8	36	5	34	0	0	55	22	2	13	2	15	1	11	1			1							1	0
9	17	62	92	23	47	17	36	12	58	8	40	0	0	7											0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION SNAKE RIVER AT
WAWAWAI, WASHINGTON 49

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	14.0	13.3	8.4	3.3	10	.7	3.3	.0	15	114	115	15	1	47	.0	223	900
10	9	61	13.5	12.3	8.4	3.6	10	.4	1.3	.1	14	110	111	18	3	43	.1	221	75
10	16	61	14.5	9.5	8.0	2.1	12	1.8	5.9	-	13	100	110	15	3	42	.1	218	780
10	23	61	11.0	10.2	8.2	2.8	-	1.0	3.1	.0	14	108	110	16	5	43	.1	222	350
10	30	61	9.5	10.9	8.1	2.4	11	.8	1.9	.0	14	114	120	21	7	45	-	230	1500
11	6	61	8.0	11.9	7.8	2.1	12	.5	1.0	.0	14	112	114	21	6	42	-	221	150
11	13	61	7.0	12.3	7.3	2.9	8	.7	2.1	.0	14	102	116	21	4	42	.1	220	*33
11	20	61	5.0	12.5	7.6	2.5	11	.9	2.5	.1	15	108	130	21	4	49	.0	248	630
11	27	61	9.0	12.4	7.8	1.9	9	.4	1.0	.1	14	110	118	21	4	44	.1	236	170
12	4	61	10.0	12.4	7.7	3.0	13	.2	.4	.1	15	110	112	14	5	44	.0	228	530
12	11	61	2.0	13.8	7.5	3.7	11	.9	2.0	.1	14	108	114	11	4	54	.1	273	230
12	18	61	4.0	13.1	7.5	.4	11	1.1	2.7	.1	14	110	118	14	5	45	.1	235	1800
1	2	62	3.5	13.0	8.1	.6	12	.9	2.7	.0	12	114	112	15	6	39	.0	224	680
1	8	62	5.0	12.4	8.0	.8	12	.8	3.0	.0	13	110	112	21	20	40	.1	219	470
1	15	62	3.0	12.8	7.5	1.5	10	.5	3.8	-	14	106	114	21	10	36	.1	204	167
1	22	62	.2	14.3	8.4	.8	12	.4	.9	-	15	132	130	-	5	47	.1	256	*33
1	29	62	2.6	13.7	8.5	1.0	-	.8	3.1	-	14	118	116	-	6	40	.1	226	*33
2	5	62	2.2	13.4	8.3	1.0	10	.7	2.3	-	13	115	116	20	13	40	.1	227	100
2	12	62	3.2	12.7	8.2	.6	11	.6	2.4	-	9	83	84	15	23	27	.1	168	1500
2	19	62	4.0	13.8	8.3	.8	11	.9	3.1	-	11	98	98	13	-	31	.1	190	1100
2	26	62	3.0	13.1	8.6	.9	11	.9	2.4	-	15	126	126	-	10	43	.1	247	230
3	5	62	3.0	13.5	7.9	-	9	1.6	3.0	-	12	108	112	-	-	34	.0	209	*33
3	12	62	4.0	12.7	8.0	-	10	1.3	3.0	.2	10	94	98	14	19	30	.1	183	2000
3	19	62	6.2	11.9	7.9	1.0	10	1.9	4.3	.1	10	92	93	-	-	29	.1	182	6000
3	26	62	6.0	11.4	7.8	.7	29	1.5	5.0	.1	8	76	74	17	370	22	.1	151	6600
4	2	62	8.0	11.2	8.2	1.1	14	1.5	4.0	.1	9	72	65	21	30	23	.1	151	950
4	9	62	7.1	11.5	8.1	.0	16	1.0	3.2	.1	6	58	54	19	36	16	.0	104	*50
4	16	62	9.0	11.1	7.6	.7	14	1.6	3.8	.1	4	38	37	20	27	9	.1	76	1200
4	23	62	10.1	10.1	7.9	.8	13	1.3	3.8	-	6	42	42	17	24	11	.0	79	270
4	30	62	8.0	11.4	7.8	.7	15	1.2	3.5	.1	3	40	42	19	11	10	.0	76	1200
5	7	62	10.0	11.1	8.1	.6	17	1.0	3.1	.1	3	38	38	15	6	9	.0	72	-
5	14	62	10.0	11.5	8.0	1.2	11	1.2	3.3	.0	3	38	35	15	13	9	.0	70	1500
5	21	62	9.5	12.1	7.5	.4	10	.9	3.0	.0	2	30	30	17	8	6	.0	56	700
5	28	62	12.0	10.4	7.8	.8	10	1.5	4.4	.1	4	38	40	19	13	10	.0	70	-
6	4	62	11.0	10.7	7.7	1.1	11	1.2	3.2	.1	-	32	32	15	9	8	.0	61	15000
6	11	62	13.5	10.0	7.5	1.0	9	1.0	3.0	.0	2	30	30	12	9	7	.0	54	*50
6	18	62	14.5	9.7	7.4	.6	11	1.2	4.5	.0	2	26	30	16	17	5	.0	49	100
6	25	62	16.5	9.2	7.2	.4	9	1.1	2.6	.1	2	32	30	15	17	6	.0	58	250
7	2	62	17.5	9.0	7.5	1.2	7	1.1	2.7	.0	4	41	41	16	7	10	.0	76	820

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE AND LOWER SNAKE RIVER
STATION LOCATION SNAKE RIVER AT
WAWAWAI, WASHINGTON 49

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	9	62	20.0	8.9	7.8	-	9	1.4	2.2	.1	4	44	43	15	4	11	.0	84	2200
7	16	62	20.0	8.8	8.0	.5	10	1.2	2.5	.1	6	52	51	11	3	13	.0	94	600
7	23	62	22.0	8.1	8.0	-	10	1.2	1.9	.1	7	62	56	11	3	17	.0	104	2600
7	30	62	23.0	7.9	8.2	-	12	.3	1.2	.1	8	64	64	11	4	19	.0	116	1200
8	6	62	21.0	9.0	8.2	1.0	9	1.6	2.3	.1	8	64	74	14	2	24	.0	134	600
8	13	62	22.7	8.7	8.5	1.0	12	1.2	3.0	.1	10	86	84	13	3	29	.0	155	50
8	20	62	24.0	8.4	8.0	-	9	1.4	3.2	.0	12	88	86	10	6	30	.0	165	50
8	27	62	19.0	8.8	7.9	.6	15	1.3	3.2	.1	9	93	94	13	2	32	.0	177	50
9	4	62	19.8	8.9	8.4	1.0	10	-	-	.1	12	100	101	14	2	37	.0	196	1400
9	10	62	18.0	8.9	8.2	1.4	11	-	-	.1	13	99	114	12	2	39	.0	209	50
9	17	62	18.0	9.1	8.4	1.0	11	1.4	3.7	.1	13	103	100	16	3	36	.1	191	-
9	22	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2400
9	24	62	20.3	9.6	8.2	.5	11	1.3	3.4	.1	15	110	105	-	2	38	.1	213	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Clarkston, Washington
Operated by U.S. Geological Survey

STATE Washington
MAJOR BASIN Pacific Northwest
MINOR BASIN Middle and Lower Snake River
STATION LOCATION Snake River at
Wawawai, Washington

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	19.900	22.300	26.000	25.400	28.000	34.700	52.500	78.600	116.000	59.700	25.200	21.200
2	19.100	22.500	28.600	23.500	30.000	34.100	58.500	74.900	120.000	56.500	25.500	22.000
3	18.800	23.500	28.000	26.400	30.000	31.700	63.700	77.600	122.000	51.800	24.200	19.200
4	18.500	22.700	28.200	26.400	27.600	27.300	66.800	81.800	126.000	47.400	23.600	18.900
5	18.000	22.700	29.000	27.600	27.000	25.000	76.500	87.000	114.000	45.400	23.800	21.600
6	18.500	22.200	30.000	26.000	29.900	30.000	89.200	86.800	107.000	43.500	23.200	20.300
7	19.000	21.300	28.900	27.700	31.000	28.100	117.000	87.500	95.800	42.300	23.100	20.500
8	19.500	21.800	28.400	45.800	31.700	27.100	118.000	93.700	85.000	40.200	26.600	19.200
9	19.900	21.500	28.000	66.800	30.700	26.900	95.600	108.000	87.100	35.400	28.200	18.600
10	19.200	22.000	25.900	50.900	31.000	30.300	81.600	121.000	95.600	34.200	28.300	17.600
11	22.000	22.400	22.000	41.800	29.000	25.300	71.000	124.000	99.300	35.000	27.000	19.500
12	24.100	22.800	23.600	38.000	31.500	23.600	61.000	119.000	106.000	34.600	24.600	19.800
13	23.300	22.400	21.700	37.300	34.200	26.900	59.000	117.000	107.000	30.600	21.800	23.900
14	25.800	22.400	22.800	32.400	35.300	26.500	62.800	114.000	108.000	31.800	23.100	21.100
15	25.700	21.900	23.900	30.100	37.800	28.600	73.600	107.000	108,000	32.700	23.400	20.500
16	23.500	21.700	23.700	30.700	40.000	28.100	83.000	100.000	103.000	32.400	23.000	18.800
17	23.600	20.700	20.900	32.500	40.400	29.500	88.000	91.000	101.000	31.500	20.500	18.900
18	23.500	20.100	21.000	30.400	42.200	26.700	95.600	91.900	102.000	29.700	20.400	20.200
19	23.200	18.800	20.900	30.600	42.600	27.000	107.000	95.300	102.000	29.100	18.900	22.200
20	22.900	18.800	21.200	28.300	44.400	33.700	126.000	96.000	100.000	29.000	18.900	20.800
21	23.000	20.800	22.200	26.800	46.800	35.100	132.000	91.800	97.700	28.800	19.200	20.500
22	22.300	22.500	26.800	24.000	47.600	37.300	115.000	88.900	95.600	26.600	19.800	19.400
23	21.800	22.800	25.000	24.700	46.700	37.200	100.000	89.000	93.000	26.000	19.100	18.900
24	23.600	22.000	25.500	28.200	42.500	33.500	104.000	98.500	87.500	25.400	19.500	19.300
25	25.500	23.400	24.400	29.400	39.000	40.800	116.000	126.000	83.400	25.100	18.800	23.300
26	25.700	25.500	22.900	28.000	37.500	49.900	114.000	136.000	87.400	24.600	17.700	25.700
27	26.000	22.800	23.800	30.400	33.700	71.200	106.000	130.000	79.500	24.500	17.800	26.000
28	29.100	23.500	24.200	28.200	33.400	77.000	103.000	130.000	73.200	24.700	18.000	23.700
29	28.500	24.600	25.600	26.300		70.000	93.200	135.000	68.000	24.800	19.300	24.000
30	25.300	24.800	25.000	29.900		59.500	84.800	126.000	62.700	24.800	21.500	26.300
31	24.200		26.300	29.800		54.600		119.000		24.900	21.500	

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Weiser, Idaho
Operated by U.S. Geological Survey

STATE	Idaho
MAJOR BASIN	Pacific Northwest
MINOR BASIN	Central Snake River
STATION LOCATION	Snake River at Payette, Idaho

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	10.500	11.800	11.500	10.800	12.500	12.100	19.800	16.400	20.400	10.100	10.400	11.700
2	10.300	11.700	11.400	10.700	12.600	11.700	19.700	19.100	20.500	9.520	10.400	10.900
3	10.300	11.900	11.300	10.900	12.500	12.200	21.200	22.900	19.400	9.200	10.800	10.300
4	10.900	11.900	11.100	10.700	13.500	13.300	22.400	23.700	19.900	8.300	10.700	10.100
5	10.300	11.800	11.000	10.700	13.700	12.400	21.800	20.900	21.200	8.000	10.900	10.300
6	10.300	11.700	11.200	10.700	12.300	13.000	22.500	21.200	20.400	7.680	11.400	12.300
7	10.300	11.800	11.300	11.000	13.000	12.600	22.900	20.300	18.200	7.680	11.200	12.500
8	10.400	11.700	11.200	11.100	12.200	14.900	22.400	18.000	16.200	7.380	10.700	11.200
9	10.100	11.900	10.900	11.700	15.000	14.700	22.100	19.400	14.500	8.220	11.200	10.800
10	10.100	11.800	10.800	10.900	15.300	14.800	19.100	18.400	14.600	8.000	11.100	10.700
11	11.700	11.700	10.700	11.200	18.200	13.400	18.600	20.300	14.600	8.430	10.200	11.000
12	11.700	11.800	11.900	11.200	21.200	14.500	17.200	16.700	14.200	8.540	9.980	12.100
13	12.200	11.500	10.900	11.100	25.300	14.300	18.500	18.600	15.300	8.360	10.200	12.400
14	12.300	11.400	10.900	10.700	28.700	13.300	18.800	18.000	14.900	8.510	9.980	12.900
15	13.000	11.200	10.800	10.600	26.000	12.400	19.900	16.100	14.400	8.540	10.200	12.900
16	12.600	11.300	11.000	11.000	20.600	12.600	21.400	16.600	14.000	8.660	10.100	12.300
17	12.600	11.300	11.200	11.600	17.600	13.400	21.200	17.200	14.200	8.580	9.980	10.800
18	12.400	11.400	10.800	10.600	18.000	13.600	20.600	16.800	14.400	8.370	10.200	12.100
19	12.100	11.300	10.700	10.300	14.500	14.000	20.300	15.700	14.400	9.230	10.200	12.200
20	12.300	11.300	11.300	10.500	15.500	15.300	20.900	18.800	14.800	9.230	9.800	12.100
21	12.400	11.400	12.500	10.200	13.900	16.100	21.300	16.700	15.100	9.290	10.100	12.100
22	12.100	11.400	13.500	11.000	12.800	15.900	19.300	16.400	14.700	8.730	9.630	12.300
23	12.200	11.800	11.700	10.500	11.700	17.800	16.500	17.600	13.700	8.660	9.970	12.200
24	12.500	12.100	10.900	10.000	11.500	16.900	16.700	19.300	13.400	8.540	10.200	12.100
25	12.200	11.800	11.300	7.500	11.600	18.300	18.200	21.000	13.300	8.500	10.100	13.200
26	12.200	11.400	11.300	10.500	11.100	20.800	17.300	22.500	12.000	9.290	10.500	13.200
27	12.600	11.800	11.200	11.500	11.800	21.200	15.000	23.300	11.800	9.460	10.300	13.400
28	13.300	11.800	11.200	11.000	12.600	21.000	16.300	20.600	11.500	9.540	10.300	13.300
29	13.200	12.600	11.300	12.000		23.600	16.000	22.600	10.700	9.630	11.000	14.000
30	11.400	11.500	10.600	11.500		22.000	17.200	22.700	10.500	9.630	11.600	14.800
31	11.700		10.700	10.900		21.600		23.400		9.820	11.500	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN CENTRAL SNAKE RIVER
STATION LOCATION SNAKE RIVER AT
PAYETTE, IDAHO 102

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
11	16	61	11	28	0	1	4	2	4	2	21	11	22	14	43	18						
11	21	61	12	5	0	1	4	3	4	3	13	11	26	14	39	18						
11	30	61	12	11	0	1	5	3	5	3	6	8	23	11	29	14						
12	7	61	12	15	0	1	3	2	3	2	10	8	43	11	53	14						
12	13	61	12	26	0	1	2	2	2	2	6	8	14	9	20	12						
12	20	61	12	29	0	1	4	3	4	3	15	4	39	7	54	8						
12	27	61	1	10	0	1	4	3	4	3	7	8	7	10	14	13						
1	3	62	1	11	0	1	0	2	0	2	13	9	19	10	32	13						
1	10	62	1	18	0	1	5	3	5	3	13	8	18	11	31	14						
1	17	62	1	29	0	1	6	3	6	3	13	9	24	11	37	14						
2	8	62	2	16	1	1	3	2	4	2	26	9	25	10	51	14						
2	14	62	2	27	2	2	5	2	7	3	57	7	34	6	91	9						
2	21	62	3	8	1	1	4	2	5	2	32	5	38	6	70	8						
2	28	62	3	15	0	1	1	2	1	2	24	5	36	6	60	8						
3	7	62	3	20	0	1	6	3	6	3	17	8	50	11	67	14						
3	14	62	3	28	1	1	1	2	2	2	14	8	29	10	43	13						
3	21	62	4	3	1	1	3	2	4	2	7	9	11	10	18	13						
3	28	62	4	9	3	2	3	2	6	3	21	9	18	8	39	12						
4	4	62	4	18	1	1	2	1	3	1	19	5	18	6	37	7						
4	10	62	4	25	0	1	4	2	4	2	17	5	24	6	41	7						
4	20	62	4	30	1	1	1	1	2	1	55	6	35	6	90	8						
4	25	62	5	25	0	1	1	1	1	1	13	6	21	7	34	9						
5	2	62	5	29	1	1	5	2	6	2	19	7	46	8	65	11						
5	9	62	6	14	1	1	3	2	4	2	9	7	24	9	33	11						
5	16	62	6	22	1	1	2	2	3	2	11	4	19	5	30	7						
5	23	62	6	27	2	1	4	2	6	2	21	6	21	7	42	9						
5	31	62	7	3	0	1	2	1	2	1	7	8	17	9	24	12						
6	6	62	7	6	1	1	3	2	4	2	8	6	23	7	31	9						
6	13	62	7	17	1	1	2	1	3	1	16	6	37	7	53	9						
6	21	62	7	23	1	1	4	2	5	2	8	5	12	6	20	7						
6	27	62	7	25	0	1	1	1	1	1	4	6	18	7	22	9						
7	11	62	8	7	0	1	4	2	4	2	4	11	27	13	31	17						
7	18	62	8	8	0	1	4	2	4	2	19	11	51	14	70	18						
7	25	62	8	15	0	1	6	3	6	3	0	22	23	14	23	26						
8	1	62	10	4	1	1	3	2	4	2	8	12	17	15	25	19						
8	7	62	8	23	0	1	3	2	3	2	3	11	22	14	25	18						
8	22	62	9	6	0	1	5	3	5	3	3	10	16	13	19	16						
8	29	62	9	11	1	1	2	2	3	2	17	13	4	17	21	21						
9	5	62	9	20	0	1	6	3	6	3	5	9	25	13	30	16						
9	12	62	9	28	0	1	2	2	2	3	7	6	15	10	22	12						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE IDAHO

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN CENTRAL SNAKE RIVER

STATION LOCATION SNAKE RIVER AT

PAYETTE, IDAHO 102

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA							DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL					ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±		MO.	DAY	µµc/g	±	µµc/g	±
9	19	62	10	17	0	1	3	2	3	2	6	9	17	14	23	17							
9	26	62	10	19	0	1	2	2	2	2	7	8	14	9	21	12							

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IDAHO

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN CENTRAL SNAKE RIVER

STATION LOCATION SNAKE RIVER AT

PAYETTE, IDAHO

102

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	4400	0	0	290	0	40	20	2590	1490	1330	640	68	4	92	3	71	2														
11	10	61	2000	0	20	110	0	20	50	800	1030	1030	1070	71	2	68	2	82	1	92	1	87	1										
11	16	61	2100	0	0	0	0	20	20	1060	990	210	270	71	3	82	2	92	1	68	1												
11	30	61	5900	0	20	80	0	40	40	3600	2090	1180	770	71	5	68	3	82	3	92	2	81	1	88	1								
12	8	61	5300	90	380	160	70	140	20	2430	2050	1620	700	71	4	68	3	82	3	92	3	16	2	88	1	87	1						
12	13	61	5200	20	250	50	0	160	0	2810	1960	1870	430	71	4	68	4	82	2	92	1	16	1	81	1	88	1	87	1	77	1		
12	27	61	7900	20	110	70	0	250	0	5090	2390	1510	70	71	5	68	4	82	3	92	3	51	1	87	1	88	1						
1	10	62	9600	110	110	200	0	380	180	4120	4460	3290	860	71	5	92	4	68	4	82	3	87	2	69	2	51	2	88	1	81	1	77	1
2	8	62	16000	770	630	90	0	160	110	10280	3940	2590	520	69	6	68	5	92	4	87	3	82	3	88	3	3	3	16	2	15	1		
2	21	62	6000	20	0	140	0	230	70	2370	3190	900	1790	73	2	92	2	81	2	88	2	75	1	82	1	87	1	77	1				
3	7	62	10100	60	40	230	0	660	130	4870	4140	1490	680	71	5	68	4	88	3	87	3	52	2	75	2	73	2	92	2	82	1	84	1
3	21	62	34300	20	0	230	0	1560	340	28930	3190	5860	2080	71	4	51	3	52	3	87	3	77	2	68	2	88	2	82	2	63	1	44	1
4	4	62	12800	0	0	160	0	1740	50	8360	2520	7370	2500	71	6	57	3	92	2	87	2	68	1	63	1	82	1	73	1	88	1	51	1
4	20	62	13500	0	40	210	0	0	0	11250	1980	5130	2740	71	7	88	2	68	1	77	1	69	1	92	1								
5	9	62	48600	0	0	370	0	370	80	27010	10720	7580	910	71	8	77	5	92	4	88	4	85	3	91	3	82	2	51	1				
5	23	62	26500	0	0	250	130	80	0	17260	8740	2950	3380	71	7	92	3	82	2	88	1	97	1	79	1	85	1						
6	6	62	21500	0	0	210	0	0	0	19030	2280	3880	3710	71	7	82	3	69	1	77	1	92	1										
6	21	62	36500	0	0	720	0	0	0	31360	4390	2570	1730	71	8	92	4	82	3	69	2	77	1	30	1	24	1						
7	11	62	49400	300	0	7170	0	340	130	31270	10170	1820	2490	71	8	92	6	38	3	26	3	82	3	32	3	24	3	84	3	69	3		
8	1	62	34000	720	0	7430	0	460	210	20300	4900	15490	5280	71	7	92	5	38	4	34	4	32	4	68	4	69	3	30	2	81	2	25	2
8	22	62	56400	170	0	7430	340	970	0	40930	6580	9240	3000	71	8	92	6	44	5	68	4	69	4	38	3	51	3	88	2	24	2	45	2
9	5	62	36600	580	0	4760	0	2240	80	25710	3190	1950	1040	71	8	92	5	51	4	34	3	24	3	38	3	69	3	68	3	3	2	67	2
9	19	62	21700	0	0	180	0	90	0	21290	180	2790	1670	71	8	92	1																

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN CENTRAL SNAKE RIVER
STATION LOCATION SNAKE RIVER AT
PAYETTE, IDAHO

102

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	92	37	26	36	80	4	36	4	19	40	20	29	11	1	17	1							0							2	0
11	10	61	36	16	92	15	80	13	26	12	44	70	0	3											1							0	1
11	16	61	36	26	80	21	92	14	26	5	34	120	20	22	11	1	21	1							0							1	0
11	30	61	36	20	92	15	80	14	26	8	43	20	10	0											0							2	0
12	8	61	36	23	92	22	80	13	26	9	33	1620	0	4											0							0	0
12	13	61	36	18	92	11	26	10	33	6	55	270	0	8											0							3	0
12	27	61	36	32	92	26	65	4	6	4	34	200	20	13	2	1	15	1							1							1	2
1	10	62	92	33	36	21	80	7	65	6	33	140	0	2											0							5	2
2	8	62	92	22	36	12	65	11	82	8	47	50	10	2											0							0	0
2	21	62	2	10	92	9	46	8	6	7	66	20	0	1											0							0	1
3	7	62	6	7	92	7	36	6	26	6	74	80	0	4											0							0	2
3	21	62	82	12	65	11	36	11	66	7	59	90	0	70	11	1	17	1							1							3	3
4	4	62	84	31	92	10	82	8	46	5	46	20	0	42	11	2	17	2	2	1					1							4	1
4	20	62	80	64	92	3	36	2	82	2	29	0	0	3											0							1	0
5	9	62	80	87	9	3	56	2	65	1	7	0	0	16	11	1									4	50	1					0	2
5	23	62	80	86	92	3	9	3	35	1	7	250	0	36	11	2	2	2	17	1					4	50	1					1	1
6	6	62	80	70	35	11	9	4	92	2	13	80	0	0											0							0	0
6	21	62	80	88	56	4	92	2	47	2	4	80	0	1											0							0	0
7	11	62	47	49	92	23	80	11	56	7	10	80	0	449	11	6	21	5	2	5	22	3	15	3	0							3	0
8	1	62	82	33	47	25	92	15	80	4	23	0	0	-											-							-	-
8	22	62	82	41	92	31	58	11	70	3	14	0	0	174	11	5	22	4	2	2					0							0	0
9	5	62	92	37	80	20	82	19	58	9	15	0	0	65	2	3	11	3	22	1					4	50	1					0	0
9	19	62	82	78	92	8	58	5	80	3	6	0	0	92	11	3	22	3	15	2	17	2	2	1	3	50	1					2	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN CENTRAL SNAKE RIVER
STATION LOCATION SNAKE RIVER AT
PAYETTE, IDAHO 102

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
11	16	61	4.0	11.2	8.4	3.4	24	-	-	.1	24	178	198	3	15	174	.0	380	-
11	21	61	3.5	11.8	8.4	4.8	20	.9	4.0	.3	31	183	208	3	15	88	.0	300	-
11	30	61	6.5	10.4	8.4	4.6	20	.5	4.4	.3	30	182	206	5	15	88	.1	350	-
12	7	61	4.0	10.8	8.2	3.5	34	.9	4.9	.3	35	184	190	30	9	65	.3	350	-
12	8	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1300
12	13	61	3.3	8.8	8.1	1.0	21	2.1	4.9	.3	33	182	206	40	12	65	.1	390	5100
12	20	61	4.4	6.1	8.1	1.0	17	1.4	5.0	.2	29	174	206	7	15	102	.1	375	7100
12	27	61	5.0	11.1	8.1	4.2	15	.8	5.4	.2	28	182	202	8	18	90	.0	390	4600
1	3	62	3.3	11.4	8.1	3.1	20	1.2	3.9	.0	28	180	208	9	14	92	.0	350	6400
1	10	62	4.4	10.4	8.1	3.8	26	1.3	4.9	.0	28	180	192	15	18	102	.1	350	4600
1	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5000
2	7	62	1.7	9.0	8.4	4.1	13	1.0	3.2	.1	27	164	204	25	20	72	.0	370	-
2	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4400
2	14	62	6.1	8.7	7.6	4.6	30	2.1	5.2	.1	26	136	182	45	290	62	.1	290	4200
2	21	62	5.5	9.8	8.3	2.6	25	2.0	6.9	.2	20	132	158	30	42	66	.2	290	1500
2	28	62	7.2	12.5	8.2	3.2	18	2.2	6.6	.1	24	134	170	30	39	70	.2	300	450
3	7	62	9.5	9.8	8.1	2.2	16	1.9	7.0	.3	23	148	168	30	37	74	.1	320	-
3	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8800
3	14	62	5.0	10.5	8.5	3.0	21	2.2	4.6	.1	30	150	172	25	20	70	.0	340	870
3	21	62	9.4	10.3	8.1	4.5	22	.8	4.3	.1	29	148	176	25	22	71	.0	330	1000
3	28	62	8.8	10.0	8.1	3.9	27	1.7	4.4	.1	25	130	154	20	180	55	.0	300	2800
4	3	62	12.2	9.5	8.4	3.3	31	.8	4.9	.2	22	130	144	30	35	45	.1	290	5200
4	10	62	10.6	10.1	8.4	3.3	26	1.9	5.2	.1	20	104	134	30	40	58	.0	260	-
4	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600
4	20	62	12.2	8.5	8.4	2.8	21	2.0	5.3	.2	10	80	82	35	40	31	.0	250	-
4	25	62	12.0	7.9	8.4	3.6	26	1.8	4.7	.1	10	84	84	30	37	38	.1	240	25000
5	2	62	13.0	9.4	8.4	4.3	25	2.0	8.0	.1	10	126	154	15	45	57	.5	290	-
5	9	62	14.0	9.4	8.4	4.7	27	2.6	6.7	.1	25	102	124	15	60	56	.0	260	1800
5	16	62	14.0	7.8	8.4	3.3	30	3.2	8.9	.1	22	112	136	20	68	66	.0	260	-
5	23	62	15.5	7.7	8.4	4.0	30	3.4	8.2	.1	20	118	126	25	68	64	.0	270	5900
5	31	62	14.4	9.1	8.5	3.4	28	3.0	8.5	.1	17	100	112	15	34	49	.1	250	-
6	6	62	13.9	9.6	8.7	5.8	27	2.0	7.5	.1	15	88	102	15	36	49	.1	210	-
6	13	62	15.6	6.3	8.1	2.2	38	1.9	6.9	.7	26	82	86	20	60	45	.1	220	4000
6	21	62	20.0	5.5	8.1	1.0	32	2.6	7.4	.3	21	96	104	15	90	55	.0	260	-
6	27	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28000
6	28	62	20.0	7.0	8.2	2.2	32	1.8	7.2	.8	19	104	112	20	46	62	.0	290	-
7	11	62	23.0	6.5	8.7	3.2	35	3.2	6.5	.1	20	136	150	15	45	82	.0	300	3100
7	18	62	20.0	2.9	8.3	2.1	33	2.5	5.7	.1	10	140	144	15	45	78	.0	320	2100
7	25	62	25.0	6.3	8.4	5.8	30	2.0	3.3	-	29	126	163	70	60	82	.3	-	2900

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN CENTRAL SNAKE RIVER
STATION LOCATION SNAKE RIVER AT
PAYETTE, IDAHO 102

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	1	62	20.0	7.2	8.3	6.2	21	3.5	6.5	-	24	146	170	25	35	81	.2	365	900
8	8	62	21.7	6.8	8.4	3.7	18	3.0	6.0	-	29		178	25	61	59	.1	300	1200
8	22	62	20.0	6.6	8.2	4.5	28	3.0	6.8	-	27	-	144	50	34	84	.2	375	8300
8	29	62	18.0	8.0	8.4	5.7	18	1.9	7.1	-	20	-	106	50	25	110	.1	375	-
9	5	62	19.0	9.2	8.5	7.0	20	2.0	3.8	.9	22	164	196	25	-	78	.0	290	7000
9	12	62	18.0	8.3	8.6	6.1	19	1.6	4.3	.3	26	154	184	45	37	84	.1	360	10000
9	19	62	17.5	8.9	8.5	5.8	29	3.6	5.5	-	19	144	176	35	40	75	.0	350	6900
9	26	62	16.5	7.6	8.4	4.4	24	2.0	5.6	-	28	146	182	25	32	43	.0	350	2100

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE COLORADO
MAJOR BASIN MISSOURI RIVER
MINOR BASIN SOUTH PLATTE RIVER
STATION LOCATION SOUTH PLATTE RIVER AT
JULESBURG, COLORADO 92

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	13	0	3	46	15	46	15	35	28	54	31	89	59						
10	9	61	11	8	6	4	29	11	35	12	13	31	43	37	56	48						
10	16	61	10	30	2	3	15	8	17	9	33	23	83	29	116	37						
10	30	61	11	7	6	4	32	12	38	13	28	30	71	37	99	48						
11	6	61	11	16	6	4	34	12	40	13	104	19	58	25	162	31						
11	14	61	11	29	0	1	32	10	32	10	0	21	41	31	41	37						
11	20	61	11	30	1	2	48	13	49	13	0	16	39	25	39	29						
11	27	61	1	16	4	3	36	13	40	13	13	26	69	38	82	46						
12	4	61	12	11	4	3	49	14	53	14	20	27	91	38	111	47						
12	12	61	12	21	0	2	22	11	22	11	2	17	54	25	56	30						
12	18	61	12	29	4	3	36	13	40	13	6	16	55	26	61	31						
1	5	62	1	30	6	4	28	10	34	11	15	25	68	28	83	38						
1	22	62	2	7	2	4	41	14	43	14	35	22	69	30	104	37						
2	13	62	2	26	6	5	33	12	39	13	26	24	72	30	98	38						
2	20	62	3	1	3	4	38	12	41	13	27	22	38	28	65	36						
2	26	62	3	14	1	2	2	6	3	6	52	23	82	32	134	36						
3	5	62	3	15	0	3	42	13	42	13	48	22	61	28	109	36						
3	12	62	3	22	2	3	15	8	17	8	30	23	57	28	87	36						
3	19	62	4	2	4	4	41	14	45	15	50	24	92	31	142	39						
3	26	62	4	5	0	3	35	13	35	13	20	22	76	29	96	36						
4	2	62	4	12	3	3	19	8	22	9	40	23	46	27	86	35						
4	11	62	6	28	2	4	28	11	30	12	127	26	64	30	191	40						
4	16	62	7	11	2	3	5	3	7	4	28	29	37	25	65	38						
4	26	62	6	15	1	3	27	9	28	9	22	34	64	43	86	55						
4	30	62	6	19	0	3	21	11	21	11	58	30	65	42	123	52						
5	7	62	6	5	0	3	20	10	20	10	85	33	129	37	214	50						
5	14	62	6	18	30	20	18	10	48	22	140	58	106	44	246	73						
5	28	62	6	28	23	14	27	9	50	17	632	59	145	33	777	68						
6	14	62	7	12	4	4	29	11	33	12	41	33	84	40	125	52						
6	26	62	7	23	0	2	41	14	41	14	20	23	60	30	80	38						
7	6	62	8	13	3	5	39	13	42	13	70	27	64	30	134	40						
7	9	62	8	6	-	-	-	-	-	-	2	3	8	4	10	5						
7	9	62	8	21	52	27	32	13	84	30	197	55	61	38	258	67						
7	16	62	8	10	1	2	13	10	14	10	14	13	99	20	113	24						
7	23	62	8	20	27	11	12	10	39	15	133	22	105	19	238	29						
7	30	62	8	21	2	3	43	14	45	14	10	26	109	37	119	45						
8	6	62	8	28	5	6	30	11	35	13	81	45	129	44	210	63						
8	13	62	8	29	3	3	12	8	15	9	5	26	46	38	51	46						
8	20	62	9	5	1	3	27	11	28	11	0	84	59	39	59	93						
8	27	62	9	12	1	2	28	14	29	14	0	151	65	50	65	159						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE COLORADO
MAJOR BASIN MISSOURI RIVER
MINOR BASIN SOUTH PLATTE RIVER
STATION LOCATION SOUTH PLATTE RIVER AT
JULESBURG, COLORADO 92

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
9	5	62	9	20	0	2	18	9	18	9	15	32	59	47	74	57						
9	10	62	9	28	0	2	36	12	36	12	5	29	88	47	93	55						
9	17	62	12	3	0	2	22	10	22	10	29	14	92	23	121	27						
9	25	62	10	18	0	0	19	10	19	10	5	27	57	39	62	47						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE COLORADO
MAJOR BASIN MISSOURI RIVER
MINOR BASIN SOUTH PLATTE RIVER
STATION LOCATION SOUTH PLATTE RIVER AT
JULESBURG, COLORADO 92

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	4000	0	60	290	0	150	0	290	3210	20	1040	78	3	91	3	88	2	89	1	38	1	87	1	84	1	71	1				
10	16	61	3200	0	80	100	0	20	0	190	2840	40	750	78	3	88	2	92	1	87	1	91	1										
11	6	61	4400	0	20	270	0	60	0	190	3870	0	660	78	4	92	2	88	2	87	1	91	1	86	1	38	1	82	1				
11	20	61	800	0	20	0	0	20	0	50	720	70	670	87	1																		
12	4	61	1300	0	20	60	0	0	0	80	1140	0	230	78	1	87	1																
12	18	61	300	0	0	70	0	0	0	0	270	20	380																				
1	5	62	2700	0	40	80	0	20	0	150	2380	20	270	87	3	88	3	92	1	78	1	85	1										
1	26	62	200	0	0	20	0	0	0	20	200	0	50																				
2	12	62	1900	0	0	50	0	20	50	70	1700	0	380	87	3	82	1	88	1	92	1												
2	20	62	2200	0	20	20	0	20	20	50	2040	0	900	88	2	82	1	66	1	84	2												
3	5	62	1600	0	0	0	0	40	20	60	1510	20	370	92	1	87	1	91	1	78	1	88	1										
3	19	62	2900	0	0	50	0	140	0	160	2560	20	1290	88	2	82	2	92	1	87	1	78	1	91	1								
4	2	62	7600	20	0	120	0	620	170	1470	5200	290	560	71	4	91	3	88	3	78	2	85	2	51	2	92	2	82	1	68	1		
4	16	62	12000	0	20	310	0	560	0	370	10790	80	990	87	5	77	4	88	4	91	3	92	3	82	3	85	2	52	2	78	1	97	1
5	7	62	4600	0	0	40	0	60	0	720	3780	760	1480	88	4	92	3	68	2														
5	28	62	8400	0	60	40	0	20	0	2420	5820	520	80	88	5	68	4	71	4	92	3	87	2	82	1	91	1	79	1				
6	5	62	6100	0	20	20	0	40	0	520	5510	60	770	88	4	87	4	78	2	91	2	82	1	85	1	92	1	79	1				
6	19	62	46000	80	250	13670	420	550	0	11520	19450	1770	7430	38	6	68	6	71	6	88	5	87	5	24	5	33	4	92	4	82	3	78	3
7	6	62	50000	250	590	3970	0	0	0	7220	37940	840	9880	88	7	87	6	68	6	92	6	91	5	38	5	79	4	86	4	24	3		
7	16	62	36800	40	0	590	550	380	0	8610	26670	510	1010	88	8	68	6	87	4	69	3	50	2	51	2	38	1	71	1	24	1		
8	6	62	18100	0	0	1200	870	390	0	1160	14450	580	2940	88	6	87	5	92	4	50	3	68	3	82	3	38	3	91	2	81	2	51	2
8	20	62	32700	0	460	1740	0	1620	0	3560	25380	290	1620	88	8	87	5	68	5	51	4	24	3	71	3	28	2	12	2	25	1		
9	5	62	21100	170	250	370	0	330	40	3810	16150	290	2400	88	7	87	5	68	5	92	3	51	2	71	1	85	1	12	1	24	1		
9	12	62	9700	180	160	930	0	540	0	2410	5500	1000	7220	88	5	87	3	68	3	69	3	51	2	26	2	71	2	92	2	38	1	3	1

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE COLORADO
MAJOR BASIN MISSOURI RIVER
MINOR BASIN SOUTH PLATTE RIVER
STATION LOCATION SOUTH PLATTE RIVER AT
JULESBURG, COLORADO 092

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT			ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	12	22	85	18	11	11	75	5	44	0	0	0											0							0	0
10	16	61	12	26	92	8	71	8	55	5	53	20	0	0											0							0	0
11	6	61	12	35	92	12	54	5	71	4	44	1120	0	6											1							0	0
11	20	61	12	29	46	8	65	6	36	5	52	20	0	0											0							0	0
12	4	61	12	24	46	10	92	7	36	6	53	80	0	0											0							0	0
12	18	61	36	15	92	14	46	5	71	5	61	70	0	0											0							0	0
1	5	62										500	0	0											0							0	0
1	26	62	64	16	71	15	12	10	70	8	51	0	0	1											0							1	0
2	12	62										270	0	0											0							1	0
2	20	62	46	11	36	10	12	7	11	7	65	90	0	0											0							0	0
3	5	62	92	12	12	11	85	9	46	5	63	80	0	0											0							0	0
3	19	62	71	17	36	13	92	10	12	9	51	410	0	0											0							0	0
4	2	62	86	14	71	10	12	9	65	8	59	410	0	3											1							1	0
4	16	62	65	19	86	10	36	6	71	6	59	310	0	1											16	76	3	50	1			1	0
5	7	62	71	20	65	13	92	10	72	9	48	0	0	0											0							0	1
5	28	62	71	35	92	16	72	5	46	5	39	-	-	-											-							-	-
6	5	62	71	16	72	12	65	12	12	6	54	0	0	0											0							0	0
6	19	62	71	14	58	12	65	7	92	6	61	0	0	2											0							1	0
7	6	62	71	11	58	10	92	8	72	7	64	0	0	8	2	1									24	77	2	76	2	5	1	0	4
7	16	62	67	50	70	14	26	14	23	4	18	0	0	6											6	50	1					0	4
8	6	62	71	20	71	7	92	7	26	4	62	0	0	0											0							0	0
8	20	62	70	57	67	25	26	7	65	4	7	0	0	227	6	5	11	3	22	3	15	2	16	2	12	51	2	50	1	76	1	0	3
9	5	62	70	54	26	15	65	9	66	6	16	0	0	197	6	4	22	4	13	3	2	3	16	2	15	50	2	51	1	76	1	3	0
9	12	62	70	42	67	19	26	9	65	8	22	0	0	107	13	5	2	2							7	50	1	76	1			3	1

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE COLORADO
MAJOR BASIN MISSOURI RIVER
MINOR BASIN SOUTH PLATTE RIVER
STATION LOCATION SOUTH PLATTE RIVER AT
JULESBURG, COLORADO 92

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END						ETHER INSOLUBLES	WATER SOLUBLES	NEUTRALS					WEAK ACIDS	STRONG ACIDS	BASES	LOSS
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL			TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS				
10	24	61	11	20	4800#	259	32	227	0	6	14	1	1	12	0	5	1	1	5
11	20	61	12	12	5280#	224	25	199	1	6	8	1	1	6	0	3	1	1	5
2	14	62	2	26	5760	243	50	193	4	13	14	1	1	11	1	7	5	1	6
3	19	62	4	2	6720#	212	39	173	2	8	14	1	0	12	1	5	2	1	7
4	30	62	5	7	4774	152	44	108	6	13	6	1	0	5	0	4	5	0	10
6	8	62	6	19	5200#	137	47	90	1	12	12	1	1	9	1	6	5	1	10
7	18	62	7	26	4320#	145	37	108	2	10	7	1	1	5	0	4	3	0	11
8	27	62	9	5	4320#	198	24	174	1	7	5	1	1	3	0	3	2	1	5

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE COLORADO
MAJOR BASIN MISSOURI RIVER
MINOR BASIN SOUTH PLATTE RIVER
STATION LOCATION SOUTH PLATTE RIVER AT
JULESBURG, COLORADO 92

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
11	6	61	4.4	10.6	7.9	-	-	-	-	-	-	-	-	17	190	-	-	-	-
11	14	61	4.4	11.7	7.6	-	-	-	-	-	-	-	-	20	170	-	-	-	-
11	21	61	3.3	11.6	7.6	-	30	-	-	-	-	-	-	15	180	-	-	-	-
11	29	61	5.0	10.0	7.6	-	-	-	-	-	-	-	-	18	140	-	-	-	-
12	4	61	4.4	8.9	7.6	-	-	-	-	-	-	-	-	6	140	-	-	-	-
12	11	61	1.1	-	7.5	-	18	-	-	-	-	-	-	4	70	-	-	-	-
12	18	61	1.1	7.2	7.6	-	-	-	-	-	-	-	-	3	25	-	-	-	16000
12	26	61	1.1	9.0	7.6	3.5	-	-	-	-	-	-	-	15	110	-	-	-	-
1	22	62	1.1	8.7	7.6	-	-	-	-	-	-	-	-	3	25	-	-	-	500
1	29	62	3.9	9.5	7.6	-	-	-	-	-	-	-	-	4	150	-	-	-	1100
2	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*330
2	26	62	1.1	-	7.6	-	11	-	-	-	-	-	-	5	100	-	-	-	*110
3	5	62	5.0	8.3	7.6	1.6	-	-	-	-	-	-	-	-	130	-	-	-	100
3	12	62	3.3	10.2	7.6	-	-	-	-	-	-	-	-	5	180	-	-	-	*110
3	19	62	10.0	8.9	7.6	1.3	-	-	-	-	-	-	-	5	200	-	-	-	110
3	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*110
4	2	62	7.2	10.5	7.6	-	19	-	-	-	-	-	-	2	270	-	-	-	*110
4	9	62	10.0	10.7	7.6	-	-	-	-	-	-	-	-	3	200	-	-	-	170
4	17	62	13.3	9.2	7.6	3.0	-	-	-	-	-	-	-	4	160	-	-	-	1300
4	23	62	16.6	8.1	7.6	-	-	-	-	-	-	-	-	4	30	-	-	-	3300
4	30	62	15.0	14.1	7.6	-	-	-	-	-	-	-	-	14	120	-	-	-	440
5	7	62	21.1	10.1	7.6	-	4	-	-	-	-	-	-	12	320	-	-	-	-
5	14	62	22.2	8.9	7.6	5.0	-	-	-	-	-	-	-	15	1000	-	-	-	7300
5	28	62	15.5	7.1	7.6	6.1	-	-	-	-	-	-	-	20	1800	-	-	-	-
6	20	62	25.5	8.3	7.6	3.2	18	-	-	-	-	-	-	10	280	-	-	-	2800
6	9	62	16.7	8.5	7.6	4.0	-	-	-	-	-	-	-	10	800	-	-	-	-
6	11	62	17.8	6.9	7.6	1.3	-	-	-	-	-	-	-	6	460	-	-	-	1000
6	26	62	25.5	-	7.6	-	-	-	-	-	57	240	648	5	95	675	.2	1390	100
7	9	62	31.1	4.9	7.6	4.2	-	-	-	-	66	224	-	5	2400	750	.9	1480	6000
7	16	62	24.4	7.2	7.6	-	-	-	-	-	61	224	710	1	10	-	.0	1350	100
7	23	62	24.4	7.0	7.6	4.9	-	-	-	-	-	-	-	6	1000	-	-	-	*100
7	30	62	26.6	10.1	7.6	8.1	-	-	-	-	48	174	572	10	160	613	.0	1369	-
8	6	62	26.6	6.9	7.6	2.5	-	-	-	-	-	-	-	4	600	-	-	-	3800
8	13	62	23.3	6.9	7.6	.9	-	-	-	-	-	-	-	5	20	-	-	-	*100
8	20	62	26.6	9.0	7.6	2.8	-	-	-	-	-	-	-	5	20	-	-	-	-
8	27	62	24.4	5.5	7.6	1.9	-	-	-	-	-	-	-	5	20	-	-	-	400
8	28	62	-	-	-	-	-	-	-	-	56	202	600	-	-	612	.0	1350	-
9	5	62	21.1	11.4	7.6	-	26	-	-	-	66	200	620	3	15	650	.0	1370	22000

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE COLORADO

MAJOR BASIN MISSOURI RIVER

MINOR BASIN SOUTH PLATTE RIVER

STATION LOCATION SOUTH PLATTE RIVER AT
JULESBURG, COLORADO

92

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
9	10	62	-	-	-	-	-	-	-	-	67	196	630	-	-	700	.0	1400	-
9	17	62	-	-	7.7	-	-	-	-	-	64	200	610	5	25	675	.0	1365	500
9	25	62	16.1	9.2	7.6	1.6	-	-	-	-	40	210	630	-	-	660	-	1520	1500

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Julesburg, Colorado
Data Supplied by State of Colorado Department of Water Resources

STATE	Colorado
MAJOR BASIN	Missouri River
MINOR BASIN	South Platte River
STATION LOCATION	South Platte River at Julesburg, Colorado

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.850	1.440	.997	1.480	1.550	.950	.955	.043	.856	.243	.983	.047
2	.807	1.520	.976	1.520	1.610	1.030	.950	.040	.862	.371	1.330	.047
3	.793	1.580	.950	1.500	1.810	1.160	.973	.038	.821	.403	1.270	.049
4	.856	1.630	.958	1.380	2.040	1.320	.966	.035	.729	.506	1.230	.054
5	.937	1.650	1.070	1.290	2.050	1.650	.935	.032	.657	.544	1.190	.055
6	.985	1.690	1.180	1.220	2.000	1.940	.924	.032	.647	.569	1.140	.060
7	1.000	1.710	1.300	1.180	1.990	2.230	.894	.032	.698	.487	.909	.055
8	.979	1.640	1.240	1.100	2.040	2.210	.840	.031	.928	.371	.667	.055
9	.950	1.660	1.230	.910	1.950	1.630	.825	.028	1.300	.270	.420	.068
10	1.020	1.620	1.200	.870	1.780	1.450	.818	.028	1.110	.187	.278	.089
11	1.120	1.610	1.140	.940	1.690	1.370	.800	.029	1.070	.128	.168	.088
12	1.190	1.600	1.120	1.120	1.700	1.250	.788	.028	1.120	.116	.111	.088
13	1.240	1.600	1.050	1.210	1.700	1.200	.778	.028	1.130	.077	.081	.085
14	1.250	1.620	1.080	1.230	1.730	1.160	.794	.029	1.070	.074	.066	.079
15	1.300	1.650	1.200	1.200	1.620	1.130	.825	.029	1.040	.077	.057	.090
16	1.380	1.650	1.320	1.200	1.450	1.060	.804	.049	1.010	.071	.055	.090
17	1.420	1.640	1.440	1.210	1.370	1.030	.744	.120	1.020	.135	.056	.102
18	1.440	1.520	1.580	1.220	1.270	1.000	.682	.123	.966	.641	.054	.107
19	1.470	1.370	1.550	1.250	1.220	1.110	.568	.164	.951	.670	.052	.102
20	1.510	1.240	1.500	1.230	1.190	1.210	.411	.211	1.020	.537	.056	.093
21	1.520	1.200	1.450	1.180	1.170	1.270	.265	.241	1.020	.426	.054	.099
22	1.490	1.160	1.500	1.140	1.160	1.320	.203	.260	.865	.328	.049	.105
23	1.480	1.120	1.520	1.180	1.150	1.250	.159	.237	.689	.208	.044	.096
24	1.440	1.100	1.530	1.240	1.090	1.140	.122	.218	.512	.151	.041	.081
25	1.400	1.070	1.540	1.280	1.000	1.100	.105	.195	.369	.094	.039	.081
26	1.400	1.060	1.490	1.290	1.010	1.040	.093	.159	.307	.080	.041	.090
27	1.430	1.050	1.350	1.300	.900	.979	.091	.479	.240	.071	.040	.103
28	1.380	1.040	1.270	1.320	.800	.966	.068	.953	.193	.066	.038	.162
29	1.390	1.030	1.290	1.380		.981	.056	1.160	.165	.064	.042	.223
30	1.410	1.010	1.320	1.420		.972	.047	1.230	.181	.088	.046	.232
31	1.400		1.440	1.480		.941		.739		.352	.046	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN SPOKANE RIVER
STATION LOCATION SPOKANE RIVER AT
POST FALLS DAM, IDAHO 114

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
5	14	62	6700	0	0	250	0	250	0	1240	4970	0	270	77	4	92	4	69	3	57	1												
6	1	62	4500	0	80	0	0	0	0	840	3610	270	680	84	4	77	4	69	2	92	2	71	2										
6	13	62	3700	0	0	60	0	80	20	870	2670	40	170	77	3	92	3	69	3	88	1												
6	28	62	800	0	0	40	0	170	0	170	400	20	170	57	1																		
7	11	62	100	0	0	60	0	0	0	0	80	40	170																				
8	1	62	300	0	0	0	0	270	0	0	40	0	0	51	1																		
8	16	62	300	0	150	0	0	0	0	20	130	0	40																				
8	31	62	900	0	0	0	0	0	0	550	380	210	380	71	1	68	1	84	1	93	1												
9	17	62	400	0	0	0	0	0	40	0	360	10	30	92	1																		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN SPOKANE RIVER
STATION LOCATION SPOKANE RIVER AT
POST FALLS DAM, IDAHO 114

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
5	14	62	61	48	47	28	9	20	92	2	2	0	0	3											1							0	0
6	1	62	61	54	47	20	9	16	92	3	7	0	0	6											4							0	0
6	13	62	61	58	47	22	9	9	95	4	7	0	0	13	11	1									3							0	0
6	28	62	47	48	61	22	92	16	9	5	9	20	0	20	11	1	17	1	46	1					2							0	0
7	11	62	47	64	95	10	61	9	2	3	14	0	0	72	17	4	11	2	46	1					7	51	1	76	1			0	0
8	1	62	47	24	95	13	9	10	2	9	44	0	0	72	17	3	11	2	21	2	16	1			24	50	3	51	2			0	0
8	16	62	95	42	47	31	46	3	61	3	21	0	0	72	17	4	11	3							39	50	4	76	3			0	0
8	31	62	47	47	95	17	61	8	9	5	23	0	0	63	11	3	17	3	22	1					27	50	4					0	0
9	17	62	95	35	9	29	47	28	61	2	6	0	0	36	17	1	22	1	11	1	5	1			6	50	1	76	1			0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE IDAHO

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN SPOKANE RIVER

STATION LOCATION SPOKANE RIVER AT POST FALLS DAM, IDAHO

114

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
5	14	62	6	25	0	1	0	1	0	1	8	5	6	5	14	7						
5	21	62	6	27	0	1	0	0	0	1	7	5	6	4	13	6						
5	28	62	7	2	0	1	0	0	0	1	9	6	9	5	18	8						
6	4	62	7	6	0	0	0	1	0	1	8	5	5	6	13	8						
6	11	62	7	14	0	0	0	1	0	1	3	3	4	4	7	5						
6	18	62	8	13	0	0	1	1	1	1	1	5	7	6	8	7						
6	25	62	7	23	0	0	0	0	0	0	10	6	5	5	15	7						
7	2	62	7	30	0	0	0	1	0	1	1	6	6	6	7	8						
7	16	62	8	3	0	0	0	1	0	1	8	5	13	5	21	7						
7	23	62	8	15	0	1	0	1	0	1	0	6	7	5	7	7						
7	30	62	8	23	0	1	0	1	0	1	4	5	5	5	9	7						
8	6	62	8	29	0	0	0	0	0	0	9	6	9	6	18	8						
8	13	62	8	31	0	0	0	0	0	0	2	5	6	5	8	7						
8	20	62	9	7	0	0	0	0	0	0	0	5	8	5	8	7						
8	27	62	9	21	0	0	0	0	0	0	1	6	7	6	8	8						
9	4	62	9	21	0	0	0	0	0	0	6	6	11	6	17	8						
9	11	62	10	4	1	2	0	0	1	2	4	11	4	6	8	13						
9	18	62	10	19	0	0	0	0	0	0	3	4	10	4	13	6						
9	24	62	10	18	0	0	0	0	0	0	8	6	7	5	15	8						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE IDAHO

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN SPOKANE RIVER

STATION LOCATION SPOKANE RIVER AT
POST FALLS DAM, IDAHO 114

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES											
BEGINNING			END								NEUTRALS									
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
8	30	62	9	7	5000	110	43	67	0	12	16	2	1	13	0	5	4	1	5
9	28	62	10	6	5000	118	44	74	1	13	11	1	1	9	0	5	4	1	9

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN SPOKANE RIVER
STATION LOCATION SPOKANE RIVER AT
POST FALLS DAM, IDAHO 114

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
5	28	62	-	-	-	-	-	-	-	-	3	-	-	-	0	-	-	-	-
6	4	62	-	-	-	-	-	-	-	-	3	24	24	5	25	10	-	-	-
7	2	62	-	-	7.2	-	-	-	-	-	2	18	28	5	*25	8	.0	-	-
7	23	62	-	-	7.7	-	-	-	-	-	1	20	-	5	*25	5	.0	47	-
7	30	62	-	-	7.6	-	-	-	-	-	5	20	24	0	*25	6	-	-	-
8	27	62	-	-	-	-	-	-	-	-	5	24	28	0	25	-	.1	-	-
9	11	62	-	-	-	-	-	-	-	-	2	20	24	0	*25	6	.0	47	-
9	18	62	-	-	-	-	-	-	-	-	3	20	24	5	*25	7	.0	50	-
9	24	62	-	-	7.2	-	9	-	-	-	3	20	40	5	0	7	.0	34	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Post Falls, Idaho
Data Supplied by U.S. Geological Survey

STATE Idaho
MAJOR BASIN Pacific Northwest
MINOR BASIN Spokane River
STATION LOCATION Spokane River at
Post Falls Dam, Idaho

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	1.300	.700	2.000	1.100	4.100	4.700	9.200	21.600	17.100	2.700	.700	.200
2	1.300	1.500	2.000	1.400	3.900	5.200	9.400	20.600	16.500	2.000	.700	.200
3	1.400	2.000	2.000	1.400	4.300	5.100	9.500	19.800	16.100	2.100	.400	.200
4	1.400	2.000	2.000	1.200	4.200	4.400	10.400	19.600	15.700	2.800	.200	.200
5	1.400	2.000	2.000	1.400	4.200	4.000	11.200	19.600	15.100	1.800	.700	.200
6	1.100	2.000	2.000	1.400	3.800	4.100	12.500	19.600	14.500	1.800	.400	.200
7	1.100	2.000	2.000	1.400	4.200	4.000	14.700	19.600	13.900	1.900	.600	.200
8	1.100	2.000	2.000	3.500	4.200	3.800	17.500	19.600	13.200	1.900	.800	.200
9	1.100	2.000	2.000	3.800	4.400	3.800	19.200	19.700	12.700	2.700	.800	.200
10	1.100	2.000	2.000	4.800	4.500	3.600	19.600	20.000	12.300	2.400	.800	.200
11	1.400	2.000	2.000	4.900	4.700	3.400	19.500	20.600	11.900	1.700	.800	1.300
12	.800	2.000	1.600	4.900	5.000	3.200	18.900	20.900	11.500	1.400	.800	1.000
13	.200	2.000	1.800	4.100	5.400	3.300	18.500	21.100	11.100	1.500	.800	.200
14	.200	2.000	2.100	4.600	5.800	3.100	18.400	21.000	7.800	1.500	.700	.200
15	.800	2.000	2.100	5.300	6.100	2.900	18.700	20.800	8.100	1.000	.300	.700
16	1.600	2.000	2.100	4.900	6.000	2.900	19.600	20.400	8.200	.800	.200	.300
17	.700	2.000	1.400	4.700	6.700	2.900	20.400	20.000	6.400	.800	1.900	.100
18	.200	2.000	2.000	4.700	6.900	2.800	21.100	19.700	3.900	.800	1.300	.100
19	.200	2.000	1.400	4.700	7.100	2.700	21.900	19.500	2.900	.800	1.200	.200
20	.200	2.000	1.400	4.600	7.100	2.800	23.000	19.300	2.800	.800	.200	.800
21	.200	2.000	1.200	4.600	7.200	2.600	24.000	19.000	2.700	.800	.200	.700
22	.200	2.000	1.700	4.800	7.200	3.200	24.500	18.700	1.700	.800	.200	.700
23	.800	2.000	1.300	4.800	7.000	2.700	24.400	18.300	1.500	.800	.200	.300
24	1.100	2.000	1.200	4.500	6.800	3.800	24.300	18.200	1.600	.800	.200	.200
25	.800	2.000	1.200	4.400	6.500	3.800	24.400	18.300	2.100	.800	.200	.200
26	.700	2.000	1.200	4.400	6.000	5.000	24.500	18.300	2.700	.800	.200	.800
27	.600	2.000	1.500	4.300	5.500	6.600	24.500	18.300	2.700	.800	.200	.800
28	.600	2.000	1.700	4.300	4.900	8.300	24.100	18.200	2.700	.800	.200	1.500
29	.600	2.030	1.500	4.300		9.000	23.400	18.200	2.700	.800	.200	1.400
30	1.000	2.000	1.100	4.200		9.200	22.500	17.900	2.700	.800	.200	1.200
31	.800		1.100	4.100		10.100		17.600		.800	.200	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MARYLAND

MAJOR BASIN NORTH ATLANTIC

MINOR BASIN SUSQUEHANNA-JUNIATA

STATION LOCATION SUSQUEHANNA RIVER AT

CONOWINGO, MARYLAND 75

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	4	61	10	18	0	0	0	1	0	1	1	4	5	5	6	6						
10	11	61	10	31	-	-	-	-	-	-	7	5	8	7	15	9						
10	18	61	10	31	-	-	-	-	-	-	6	5	2	7	8	9						
10	25	61	11	9	-	-	-	-	-	-	6	5	7	7	13	9						
11	3	61	12	5	0	1	0	1	0	1	3	4	12	6	15	8						
11	15	61	11	28	-	-	-	-	-	-	3	6	11	8	14	10						
11	22	61	12	5	-	-	-	-	-	-	0	4	10	6	10	8						
11	29	61	12	8	0	1	0	1	0	1	3	6	28	8	31	10						
12	6	61	12	15	0	1	0	1	0	1	12	4	32	6	44	8						
12	13	61	12	21	-	-	-	-	-	-	10	5	24	7	34	9						
12	20	61	12	29	-	-	-	-	-	-	8	6	20	7	28	9						
12	27	61	1	8	-	-	-	-	-	-	13	6	24	7	37	9						
1	3	62	1	12	0	1	0	1	0	1	24	5	44	6	68	8						
1	6	62	1	17	-	-	-	-	-	-	22	6	31	7	53	9						
1	12	62	1	22	-	-	-	-	-	-	24	6	24	7	48	9						
1	15	62	2	7	-	-	-	-	-	-	27	4	19	5	46	7						
1	24	62	2	5	-	-	-	-	-	-	28	6	27	6	55	8						
1	31	62	2	9	-	-	-	-	-	-	14	6	24	7	38	9						
2	7	62	2	16	0	1	0	1	0	1	9	4	23	5	32	7						
2	20	62	3	5	-	-	-	-	-	-	1	5	14	7	15	9						
2	28	62	3	14	-	-	-	-	-	-	81	8	52	7	133	11						
3	8	62	3	20	0	1	1	1	1	1	60	7	25	7	85	10						
3	14	62	4	17	-	-	-	-	-	-	50	8	24	6	74	10						
3	21	62	4	3	-	-	-	-	-	-	39	6	30	6	69	8						
3	28	62	4	11	-	-	-	-	-	-	32	6	13	6	45	8						
4	4	62	4	19	3	1	0	0	3	1	41	6	22	5	63	7						
4	11	62	4	26	-	-	-	-	-	-	23	6	12	6	35	8						
4	18	62	5	1	-	-	-	-	-	-	13	6	14	6	27	8						
4	28	62	5	25	-	-	-	-	-	-	4	6	8	7	12	9						
5	2	62	6	25	-	-	-	-	-	-	6	5	8	5	14	7						
5	9	62	6	14	0	0	0	1	0	1	2	5	6	6	8	7						
5	16	62	6	21	-	-	-	-	-	-	6	6	31	8	37	10						
5	23	62	6	27	-	-	-	-	-	-	0	6	6	7	6	9						
5	31	62	7	3	-	-	-	-	-	-	0	6	8	7	8	9						
6	6	62	7	9	0	0	0	1	0	1	0	13	13	7	13	15						
6	13	62	7	13	-	-	-	-	-	-	6	3	21	5	27	6						
6	20	62	7	20	-	-	-	-	-	-	1	3	17	4	18	5						
6	27	62	7	30	-	-	-	-	-	-	1	6	8	8	9	10						
7	25	62	8	21	0	0	0	1	0	1	6	5	18	7	24	8						
8	1	62	10	12	-	-	-	-	-	-	3	5	16	8	19	9						
8	8	62	8	23	0	0	0	0	0	0	7	5	13	7	20	9						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN SUSQUEHANNA-JUNIATA
STATION LOCATION SUSQUEHANNA RIVER AT
CONOWINGO, MARYLAND 75

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	15	62	9	5	-	-	-	-	-	-	0	3	8	4	8	5						
8	22	62	9	11	-	-	-	-	-	-	3	6	11	9	14	11						
8	29	62	9	17	0	0	0	1	0	1	0	5	17	8	17	9						
9	5	62	9	27	0	0	1	1	1	1	8	7	22	10	30	12						
9	10	62	10	9	-	-	-	-	-	-	1	6	15	10	16	13						
9	19	62	10	16	-	-	-	-	-	-	0	6	17	9	17	11						
9	26	62	10	24	0	0	0	0	0	0	9	5	17	8	26	9						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN SUSQUEHANNA-JUNIATA
STATION LOCATION SUSQUEHANNA RIVER AT
CONOWINGO, MARYLAND 75

DATE OF SAMPLE			ALGAE *(Number per milliliter)*										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED *(Pigmented)*		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	4	61	600	0	0	60	0	60	0	270	210	60	60	68	1																		
10	18	61	100	0	0	20	0	0	0	40	20	20	0																				
11	1	61	300	0	0	60	0	20	0	100	80	60	20																				
11	15	61	200	0	0	20	0	20	0	20	90	50	20																				
12	6	61	1600	0	0	270	0	630	160	380	160	130	220	51	2	71	1	57	1	38	1												
12	27	61	300	0	0	100	0	20	0	100	100	0	80																				
1	3	62	1200	20	0	0	0	160	0	270	720	50	70	73	1																		
1	15	62	1400	90	0	90	0	70	0	410	790	90	230	71	1	88	1	87	1														
2	7	62	300	0	0	60	0	20	0	100	80	60	100																				
2	28	62	700	0	0	0	0	0	0	50	690	90	1120	92	1																		
3	7	62	700	0	0	20	0	0	0	100	540	40	40	92	1																		
3	21	62	1800	0	0	0	0	20	0	40	1740	40	480	92	2	82	1	85	1														
4	4	62	1700	0	0	40	0	60	40	210	1370	120	290	92	2	82	1																
4	18	62	6400	460	0	110	0	40	0	520	5280	170	1370	92	3	87	3	85	3	82	2	68	2	81	2	73	2	3	2	88	2	79	1
5	2	62	2500	0	60	320	0	40	110	1220	760	2130	720	68	3	77	2	71	2	92	1												
5	15	62	10100	0	0	580	0	120	80	3060	6290	750	2110	77	5	68	5	88	4	92	3	87	1	71	1	38	1	81	1	40	1		
5	23	62	3500	0	40	950	0	40	0	1010	1410	1480	990	68	3	92	3	24	2	77	2	38	1	40	1	88	1						
6	6	62	800	0	0	130	0	0	0	420	250	40	380	68	2																		
6	20	62	800	0	0	150	0	100	150	150	230	80	60																				
7	11	62	2900	2650	0	0	0	0	40	120	80	0	0	4	5																		
7	18	62	100	0	0	0	0	0	0	40	80	210	250																				
8	1	62	400	0	0	0	0	0	0	80	330	40	80																				
8	15	62	300	40	0	0	0	0	40	170	40	40	40																				
9	5	62	500	0	0	40	0	0	0	370	80	40	80	67	2																		
9	19	62	100	0	30	20	0	20	0	20	0	20	90																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN SUSQUEHANNA-JUNIATA
STATION LOCATION SUSQUEHANNA RIVER AT
CONOWINGO, MARYLAND 075

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	4	61	58	32	26	22	82	9	56	5	32	0	0	25	17	1	11	1	22	1					3							0	0
10	18	61										1060	0	2											4	50	1					0	0
11	1	61	47	34	56	14	19	9	26	9	34	0	0	0											2							0	0
11	15	61	47	40	56	34	58	7	19	2	17	0	10	63	11	4									51	51	4	50	2	76	2	0	0
12	6	61	82	31	26	9	71	6	70	6	48	0	0	13	21	1									2							0	0
12	27	61	92	17	45	12	70	9	64	8	54	0	0	1											0							0	0
1	3	62	2	18	92	12	82	12	26	11	47	0	0	0											0							0	0
1	15	62	70	15	92	13	82	8	64	7	57	0	0	2											0							0	0
2	7	62	92	31	64	8	26	6	47	5	50	20	0	1											0							0	0
2	28	62	92	29	36	13	51	5	64	5	48	20	0	0											0							1	0
3	7	62	92	5	64	7	43	6	50	5	67	0	0	1											0							2	0
3	21	62	92	31	36	12	51	9	45	5	43	20	0	0											0							1	0
4	4	62	92	33	62	14	36	13	45	4	36	20	0	0											0							3	0
4	18	62	92	17	36	9	52	6	2	6	62	0	0	1											0							0	0
5	2	62	92	40	27	12	9	10	82	9	29	0	10	2											0							0	0
5	15	62	27	39	9	19	67	13	92	7	22	0	0	7	21	1									0							0	0
5	23	62	27	30	9	33	91	9	92	6	22	0	0	250	11	6	2	2	17	1					5	76	1					0	0
6	6	62	9	28	27	15	82	7	26	6	44	0	0	552	11	7	17	5	46	2					220	50	5	51	5	76	5	0	0
6	20	62	92	17	28	11	80	9	26	7	56	0	10	126	46	4	11	4	17	1					84	51	4	50	4	76	3	0	0
7	11	62	27	15	26	15	82	8	58	5	57	0	0	22	17	2									6	50	1					0	0
7	18	62	47	14	82	12	26	9	58	8	57	0	0	43	17	3	11	2	15	1					51	50	4	76	2	52	2	0	8
8	1	62	27	23	47	19	26	9	18	8	41	0	0	90	11	5									10	50	2					0	0
8	15	62	47	53	18	25	56	5	2	2	15	0	0	80	17	3	46	3	22	3	11	1			15	77	2	50	2			0	0
9	5	62	18	53	47	9	92	4	2	4	30	0	0	162	17	4	11	4	22	3	15	2			38	51	3	50	2	76	2	0	0
9	19	62	19	48	92	6	26	6	9	4	36	10	0	138	17	4	22	4	5	2	46	1	11	1	21	50	3	51	1	77	1	0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN SUSQUEHANNA-JUNIATA
STATION LOCATION SUSQUEHANNA RIVER AT
CONOWINGO, MARYLAND

75

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES					CHLOROFORM EXTRACTABLES								
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
11	15	61	11	22	5100	203	63	140	3	13	22	2	1	18	1	7	4	1	13
12	27	61	1	3	4940	138	58	80	1	13	24	3	2	18	1	7	4	1	8
1	31	62	2	7	4879	166	61	105	4	15	20	2	2	14	2	7	4	1	10
3	6	62	3	14	5585	134	57	77	1	13	21	3	2	15	1	6	3	1	12
4	11	62	4	18	5156	95	33	62	3	8	10	2	1	6	1	3	2	1	6
5	3	62	5	15	5133	139	65	74	2	20	18	2	2	13	1	8	6	1	10
6	20	62	6	29	5442	226	128	98	6	37	35	3	3	28	1	14	15	3	18
8	1	62	8	10	5669	216	107	109	3	28	27	2	2	22	1	11	16	1	21
8	30	62	9	7	4914	269	95	174	3	22	26	1	1	23	1	10	10	2	22

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN SUSQUEHANNA-JUNIATA
STATION LOCATION SUSQUEHANNA RIVER AT
CONOWINGO, MARYLAND 75

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	4	61	22.2	6.2	7.2	1.5	-	-	-	-	11	43	120	8	38	-	-	-	200
10	11	61	19.4	5.5	7.3	1.0	-	-	-	-	12	41	130	6	5	-	-	-	20
10	18	61	17.8	6.7	-	.7	-	-	-	-	12	-	-	6	4	-	-	-	340
10	25	61	17.8	7.3	7.1	.9	-	-	-	-	11	45	146	6	10	-	-	-	8
11	1	61	15.6	7.8	7.3	-	-	-	-	-	11	46	155	4	3	-	-	-	6
11	8	61	16.7	8.8	7.1	1.3	-	-	-	-	12	46	159	4	6	-	-	-	10
11	15	61	12.8	8.6	7.3	.8	-	-	-	-	16	47	181	6	4	-	-	-	200
11	22	61	12.2	9.4	7.3	-	-	-	-	-	16	45	185	4	4	-	-	-	*2
11	29	61	7.8	11.4	7.3	1.4	-	-	-	-	15	49	180	7	8	-	-	-	97
12	6	61	7.8	12.0	7.1	1.8	-	-	-	-	15	36	143	6	5	-	-	-	12
12	13	61	6.7	12.6	7.1	1.8	-	-	-	-	11	34	108	6	4	-	-	-	-
12	20	61	4.4	12.9	7.1	1.7	-	-	-	-	11	33	103	7	8	59	-	168	43
12	27	61	2.2	12.8	7.3	1.0	-	-	-	-	10	42	109	7	5	-	-	-	-
12	29	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	360
1	3	62	3.3	13.5	7.1	.8	3	-	-	-	11	34	96	6	6	-	-	-	380
1	12	62	3.3	14.4	7.0	1.1	7	-	-	.3	9	27	72	11	63	45	.1	122	3800
1	17	62	2.2	13.8	7.1	1.4	8	1.0	3.9	.3	9	27	67	8	20	41	.1	121	4200
1	24	62	1.7	13.6	6.9	.6	7	.5	3.6	.3	8	22	79	7	13	-	.0	138	340
1	31	62	1.7	-	6.9	1.0	1	.7	3.5	.1	9	25	84	4	3	58	.1	134	54
2	7	62	1.7	13.1	7.1	-	4	.8	4.4	.1	9	25	81	4	4	55	.0	132	35
2	20	62	2.8	12.6	6.9	.7	4	.8	4.4	.2	10	23	100	5	7	76	.2	154	100
2	28	62	3.9	13.6	6.9	3.3	15	1.4	4.9	.1	11	29	78	12	142	48	.1	134	6000
3	8	62	1.7	13.8	6.9	1.8	6	1.0	4.5	.1	8	20	58	10	10	35	.1	100	-
3	14	62	2.8	13.0	7.1	1.6	8	2.7	4.6	.1	7	27	75	6	135	49	.1	132	1000
3	21	62	5.6	12.5	7.1	-	13	2.6	4.5	.0	6	24	56	14	40	32	.1	96	-
3	28	62	7.8	12.2	7.0	1.3	8	1.9	3.6	.1	5	19	50	8	120	31	.1	85	850
4	4	62	8.9	13.0	6.9	1.0	21	2.6	4.9	.1	3	17	36	12	150	-	-	75	600
4	11	62	10.0	12.2	6.9	.8	-	1.9	3.9	-	6	19	40	8	35	27	-	74	190
4	18	62	8.3	12.4	7.1	.7	1	.9	2.2	.2	7	22	55	5	18	35	.0	93	510
4	25	62	13.3	10.5	7.2	-	5	.8	2.9	.1	7	23	68	4	25	47	.0	110	180
5	2	62	13.3	8.9	7.0	1.2	6	-	-	.1	7	29	114	4	28	48	.1	114	160
5	9	62	17.8	9.8	7.1	1.5	2	1.1	2.4	.1	7	33	79	4	12	44	.0	125	48
5	16	62	16.7	8.9	7.4	1.0	8	.7	2.1	.1	7	33	83	7	10	54	.2	132	60
5	23	62	20.6	6.8	7.1	.7	2	1.4	2.8	.1	7	36	86	7	6	[illegible]	.0	139	290
5	29	62	23.3	5.3	7.1	1.8	2	1.6	2.8	.1	8	37	97	4	7	66	.0	161	510
6	6	62	23.9	5.9	7.1	1.3	-	-	-	.1	9	42	111	5	8	-	.0	178	14
6	13	62	24.4	4.2	7.0	1.4	-	-	-	-	10	42	118	6	7	-	-	-	1500
6	20	62	24.4	4.4	7.0	-	-	-	-	-	-	42	123	-	5	-	-	-	20
6	27	62	25.6	4.9	6.9	-	-	-	-	-	9	27	157	6	4	-	-	-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MARYLAND
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN SUSQUEHANNA-JUNIATA
STATION LOCATION SUSQUEHANNA RIVER AT
CONOWINGO, MARYLAND 75

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	11	62	24.4	4.3	7.1	1.9	6	-	-	.5	10	43	142	6	4	97	.0	218	61
7	18	62	26.1	3.5	7.0	-	6	-	-	.0	11	46	141	6	7	85	.0	243	250
7	25	62	25.0	3.6	7.0	-	6	-	-	.0	12	43	144	6	5	102	.0	237	8
8	1	62	25.6	3.8	7.0	-	-	-	-	-	-	44	-	6	6	-	-	-	12
8	8	62	24.4	4.0	7.0	1.6	6	-	-	.0	14	43	159	6	4	105	.0	272	-
8	15	62	24.4	4.5	7.2	2.5	4	.7	3.9	-	13	41	176	4	3	127	.0	315	24
8	22	62	25.6	5.4	7.0	1.0	6	-	-	-	20	42	189	4	3	147	-	328	*2
8	29	62	24.4	-	7.2	1.4	11	-	-	.0	14	45	194	4	3	156	-	319	22
9	5	62	24.4	4.3	7.3	1.5	8	-	-	-	17	38	200	4	3	144	.0	349	10
9	12	62	24.4	4.5	7.3	1.2	5	-	-	-	17	40	210	4	2	181	.0	333	-
9	19	62	23.9	5.0	7.1	1.5	8	-	-	-	17	40	211	4	2	169	.0	366	220
9	26	62	20.6	6.1	7.3	1.6	8	-	-	-	17	40	197	6	2	144	.0	322	160

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Marietta, Pennsylvania
Operated by U.S. Geological Survey

STATE Maryland

MAJOR BASIN North Atlantic

MINOR BASIN Susquehanna-Juniata

STATION LOCATION Susquehanna River at Conowingo, Maryland

	October	November	December	January	February	March	April	May	June	July	August	September
1	4.200	3.780	18.700	11.500	28.000	135.000	123.000	34.000	11.400	5.430	3.220	5.470
2	4.600	3.600	16.000	11.000	25.000	115.000	234.000	35.100	11.200	5.150	3.200	4.780
3	4.420	3.660	14.400	10.500	21.000	95.700	247.000	42.200	10.900	4.960	2.830	5.350
4	4.520	3.840	13.100	10.000	20.000	71.200	195.000	48.700	10.100	5.040	3.060	4.840
5	4.200	4.060	12.300	11.500	19.500	55.800	150.000	47.400	10.100	4.840	3.390	4.200
6	4.260	4.840	11.200	13.000	22.000	47.400	118.000	43.500	10.100	4.480	3.030	4.270
7	4.450	5.540	11.200	28.000	21.000	39.800	97.600	39.800	10.100	4.530	3.030	4.200
8	4.730	5.720	10.900	61.100	18.000	35.100	135.000	36.200	9.360	4.150	3.360	4.670
9	4.680	5.530	9.860	79.500	19.000	31.900	195.000	34.000	8.860	4.170	4.060	4.510
10	4.820	4.990	10.100	66.000	19.000	29.900	192.000	30.900	8.380	3.620	5.720	4.200
11	4.760	5.160	10.900	46.000	18.000	29.000	155.000	29.000	7.900	3.510	5.350	3.760
12	4.550	5.160	11.700	40.000	17.000	42.300	128.000	27.100	7.670	3.350	4.830	3.690
13	4.410	4.940	12.300	30.000	15.000	87.700	126.000	26.300	9.360	3.310	5.350	3.600
14	4.040	5.180	12.000	21.000	15.000	97.600	130.000	24.600	10.100	3.330	5.170	4.030
15	4.680	6.070	10.500	22.000	13.500	109.000	130.000	23.100	11.700	3.200	4.510	3.940
16	4.380	6.240	9.360	25.000	12.500	111.000	124.000	21.600	10.400	3.730	4.200	3.440
17	4.080	8.380	10.100	33.000	13.500	93.800	109.000	19.500	10.600	3.440	4.510	3.470
18	3.970	8.620	11.400	36.000	13.500	74.500	93.800	18.000	11.400	3.640	4.830	3.520
19	4.080	9.440	17.000	33.000	15.000	63.300	81.300	17.300	10.600	3.890	4.830	3.300
20	3.950	11.200	20.100	32.000	15.000	60.300	74.500	17.000	9.610	3.840	4.510	3.470
21	4.050	11.400	21.600	29.000	14.000	64.900	71.200	16.000	9.610	3.770	4.200	3.280
22	4.370	10.900	22.000	25.000	15.000	92.000	68.000	15.600	8.380	4.380	4.200	3.440
23	3.970	10.100	23.000	24.000	14.500	130.000	63.300	16.000	7.670	4.160	4.050	3.280
24	3.870	10.900	23.000	22.000	26.000	148.000	58.800	16.000	8.050	4.150	3.610	3.200
25	4.360	12.300	22.000	24.000	54.000	139.000	52.900	16.000	7.440	3.900	3.760	3.170
26	3.330	12.800	18.000	27.000	67.000	126.000	50.100	13.700	7.670	3.900	3.580	3.030
27	3.760	20.600	19.000	29.000	75.000	109.000	47.400	13.400	7.440	3.840	3.440	3.110
28	3.530	23.900	18.000	33.000	110.000	99.500	43.500	13.400	7.210	3.530	3.550	3.520
29	3.670	21.600	16.000	34.000		95.700	38.600	12.800	6.520	3.590	10.800	5.500
30	3.900	20.100	12.000	36.000		93.800	36.200	12.300	5.620	3.560	9.110	7.210
31	3.870		10.500	35.000		97.600		11.200		3.220	7.210	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE PENNSYLVANIA

MAJOR BASIN NORTH ATLANTIC

MINOR BASIN SUSQUEHANNA RIVER-NORTH BRANCH

STATION LOCATION SUSQUEHANNA RIVER AT
SAYRE, PENNSYLVANIA 76

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
10	2	61	10	20	-	-	-	-	-	-	1	5	9	7	10	9						
10	9	61	10	23	-	-	-	-	-	-	0	10	0	13	0	17						
10	16	61	11	1	-	-	-	-	-	-	6	5	17	7	23	9						
10	23	61	11	2	0	0	0	1	0	1	15	4	11	6	26	7						
10	30	61	11	10	-	-	-	-	-	-	6	5	19	7	25	9						
11	6	61	11	22	-	-	-	-	-	-	6	5	27	7	33	9						
11	13	61	11	27	-	-	-	-	-	-	6	5	30	7	36	9						
11	20	61	11	30	-	-	-	-	-	-	4	6	29	7	33	9						
11	28	61	12	6	0	0	0	1	0	1	25	4	30	5	55	6						
12	4	61	12	14	-	-	-	-	-	-	4	4	6	4	10	6						
12	11	61	12	27	-	-	-	-	-	-	4	5	15	6	19	8						
12	18	61	12	29	-	-	-	-	-	-	16	5	36	6	52	8						
12	26	61	1	4	0	0	0	1	0	1	17	4	19	5	36	6						
1	15	62	1	30	-	-	-	-	-	-	10	6	16	6	26	9						
1	22	62	2	7	0	1	0	1	0	1	18	5	17	5	35	7						
1	29	62	2	12	-	-	-	-	-	-	27	11	46	12	73	23						
2	5	62	2	20	-	-	-	-	-	-	7	5	17	6	24	8						
2	12	62	2	27	-	-	-	-	-	-	15	6	38	7	53	9						
2	19	62	3	2	-	-	-	-	-	-	0	5	13	6	13	8						
2	26	62	3	13	0	1	0	1	0	1	0	4	12	5	12	6						
3	5	62	3	19	-	-	-	-	-	-	26	5	67	6	93	7						
3	12	62	3	23	-	-	-	-	-	-	34	7	32	6	66	9						
3	15	62	3	30	-	-	-	-	-	-	22	6	22	6	44	8						
3	26	62	4	6	0	1	0	1	0	1	31	4	43	4	74	5						
4	2	62	4	19	-	-	-	-	-	-	80	11	53	6	133	13						
4	9	62	4	30	-	-	-	-	-	-	30	7	15	6	45	9						
4	16	62	5	1	-	-	-	-	-	-	1	5	7	6	8	7						
4	23	62	5	23	-	-	-	-	-	-	5	6	17	8	22	10						
4	30	62	6	4	-	-	-	-	-	-	26	8	16	8	42	11						
5	7	62	6	21	-	-	-	-	-	-	5	7	2	8	7	11						
5	14	62	6	26	-	-	-	-	-	-	6	7	6	7	12	10						
5	21	62	6	27	-	-	-	-	-	-	2	6	5	7	7	9						
5	28	62	6	29	0	1	0	0	0	1	3	3	12	4	15	5						
6	4	62	7	6	-	-	-	-	-	-	3	7	12	8	15	11						
6	11	62	7	11	-	-	-	-	-	-	7	6	11	7	18	9						
6	18	62	7	16	-	-	-	-	-	-	0	5	13	8	13	9						
6	25	62	7	23	-	-	-	-	-	-	7	6	11	7	18	9						
7	2	62	8	6	-	-	-	-	-	-	2	4	8	5	10	6						
7	9	62	8	13	-	-	-	-	-	-	6	4	12	5	18	6						
7	16	62	8	7	-	-	-	-	-	-	3	5	18	7	21	9						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN SUSQUEHANNA RIVER-NORTH BRANCH
STATION LOCATION SUSQUEHANNA RIVER AT
SAYRE, PENNSYLVANIA 76

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
7	23	62	8	20	0	0	0	1	0	1	7	2	16	3	23	4						
7	30	62	8	22	-	-	-	-	-	-	3	5	8	7	11	9						
8	6	62	8	29	-	-	-	-	-	-	3	5	19	7	22	9						
8	20	62	9	6	-	-	-	-	-	-	8	5	14	7	22	9						
8	27	62	9	21	0	0	0	0	0	0	3	6	15	8	18	10						
9	4	62	10	2	-	-	-	-	-	-	4	5	6	8	10	9						
9	10	62	10	9	-	-	-	-	-	-	8	5	4	7	12	9						
9	17	62	10	14	-	-	-	-	-	-	2	5	13	7	15	8						
9	24	62	10	17	0	0	0	0	0	0	2	5	17	7	19	8						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN SUSQUEHANNA RIVER–NORTH BRANCH
STATION LOCATION SUSQUEHANNA RIVER AT
SAYRE, PENNSYLVANIA 76

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	17700	40	0	3650	0	2320	20	11180	480	1590	410	71	6	68	5	69	3	51	4	31	4	38	2	34	2	40	1	55	1	30	1
10	16	61	4700	40	0	850	0	2480	20	990	290	290	150	51	5	71	3	68	2	38	1	31	1										
11	6	61	4600	0	40	420	0	390	0	3420	330	580	310	71	5	68	3	51	2														
11	20	61	3300	140	0	250	0	290	20	2090	500	680	410	68	4	71	3	57	1	51	1												
12	4	61	500	0	0	20	20	20	0	100	370	0	150																				
12	18	61	400	0	0	0	0	20	20	80	230	60	100																				
1	2	62	200	0	0	0	0	0	0	40	150	20	60																				
1	15	62	1100	50	0	0	0	0	20	110	880	50	290	82	1	92	1																
2	5	62	100	0	0	0	0	0	0	90	50	20	90																				
2	19	62	700	0	0	20	0	40	0	560	120	40	0	71	2																		
3	5	62	500	0	0	20	0	20	20	110	360	50	110																				
3	19	62	900	0	0	40	0	20	0	80	700	60	170	82	1																		
4	2	62	2900	0	0	40	0	100	20	250	2510	250	560	82	3	92	2	87	1	81	1	79	1	69	1	88	1						
4	16	62	200	0	0	0	0	40	0	60	80	0	40																				
5	7	62	3100	0	0	80	0	250	20	750	1970	80	210	71	3	81	2	85	2	77	1	92	1	87	1	57	1	82	1	79	1		
5	21	62	20800	0	210	1840	20	230	250	10760	7470	3550	1480	68	6	88	4	71	4	81	4	85	3	92	3	82	2	32	2	38	2	87	2
6	4	62	94700	80	6880	51530	380	1940	40	25490	8310	17600	5060	24	8	71	8	17	6	40	6	68	6	81	4	38	4	30	4	34	4	85	4
6	18	62	110000	6620	0	47070	0	12630	830	40370	2490	15940	210	68	9	24	8	51	7	25	6	34	6	2	5	38	5	31	5	40	5	3	4
7	2	62	40000	1570	0	30660	0	2260	580	3520	1410	1570	80	38	7	25	5	51	4	40	4	68	4	3	3	71	3	26	3	44	3		
7	16	62	77400	1900	840	38870	0	5740	40	17430	12530	4090	3880	38	7	40	7	68	7	51	6	71	6	88	6	3	3	25	3	26	3	29	3
8	6	62	18500	210	0	6050	0	3440	2190	1350	5300	1240	1860	51	5	38	5	88	5	60	4	68	4	25	4	40	3	87	3	79	3	3	1
8	20	62	121800	4350	970	69880	0	7510	0	35740	3380	7890	1730	24	9	68	8	71	7	40	7	51	6	38	6	3	5	26	5	30	4	87	4
9	4	62	5100	590	0	3470	0	110	0	380	560	250	200	38	4	3	2	26	2	68	2	87	1	25	1	45	1	88	1	44	1		
9	17	62	9100	990	0	6010	0	740	0	740	560	270	630	24	4	38	4	26	3	51	3	3	3	68	3	87	1	5	1	41	1	79	1

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN SUSQUEHANNA RIVER-NORTH BRANCH
STATION LOCATION SUSQUEHANNA RIVER AT
SAYRE, PENNSYLVANIA 076

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	82	49	26	21	23	12	27	9	9	0	0	166	20	5	2	3	6	1	22	1			1							0	0
10	16	61	82	43	26	20	64	6	70	6	25	0	0	0											5							0	0
11	6	61	82	54	26	15	16	6	64	5	20	0	0	7											1							1	0
11	20	61	26	36	82	19	64	8	70	7	30	0	0	15	15	2									0							6	0
12	4	61	64	14	16	9	36	8	82	7	62	20	0	4											0							0	0
12	18	61	36	23	64	10	92	8	82	6	53	0	10	3											0							0	0
1	2	62	36	15	51	11	82	9	64	9	56	0	10	1											0							0	0
1	15	62	36	23	92	14	64	7	51	6	50	110	0	2											0							2	1
2	5	62	36	21	92	17	16	11	31	9	42	0	0	1											0							0	0
2	19	62	82	20	51	14	36	8	92	7	51	80	0	1											0							0	0
3	5	62	51	21	92	13	36	13	45	7	46	20	0	1											0							0	0
3	19	62	36	27	51	15	92	11	63	7	40	20	0	0											0							0	0
4	2	62	36	22	92	12	62	10	16	6	50	20	0	0											0							0	0
4	16	62	64	13	36	10	65	9	92	8	60	0	0	0											0							0	0
5	7	62	82	31	31	11	9	10	36	5	43	40	0	4											0							0	0
5	21	62	27	37	31	13	67	11	82	9	30	250	0	21	6	1									0							6	0
6	4	62	82	47	31	11	27	8	51	6	28	0	0	198	11	6									0							0	2
6	18	62	27	86	82	3	16	2	31	2	7	0	10	31	20	2	46	1							0							1	0
7	2	62	26	33	82	22	16	12	27	5	28	0	0	13	15	1									0							0	1
7	16	62	27	38	70	17	82	16	26	15	14	40	0	2380	22	9	47	4	46	2	11	2	2	2	0							1	0
8	6	62	70	40	27	15	26	14	64	9	22	0	0	1590	22	8	15	2	17	2	21	2	11	1	0							1	0
8	20	62	26	32	82	31	27	16	64	5	16	0	0	373	22	6	15	2	18	2	16	2			0							0	3
9	4	62	27	33	26	21	64	10	70	9	27	0	0	75	22	4	15	3							0							0	0
9	17	62	26	37	64	20	16	17	27	7	19	0	0	22	2	1	15	1							1							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE	PENNSYLVANIA
MAJOR BASIN	NORTH ATLANTIC
MINOR BASIN	SUSQUEHANNA RIVER-NORTH BRANCH
STATION LOCATION	SUSQUEHANNA RIVER AT SAYRE, PENNSYLVANIA

76

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	19	61	11	16	6386#	207	82	125	2	14	37	5	3	26	3	10	7	2	10
12	4	61	12	13	1846#	242	72	170	4	19	22	6	2	14	0	7	4	1	15
1	2	62	1	10	2295	267	64	203	2	17	23	4	2	15	2	8	3	1	10
2	5	62	2	13	2080#	366	139	227	7	38	38	3	2	31	2	14	11	6	25
3	5	62	3	14	3478	246	97	149	1	18	35	7	5	21	2	15	5	2	21
4	2	62	4	12	5890	88	29	59	3	7	8	2	1	5	0	3	2	0	6
5	7	62	5	16	4071	125	57	68	2	16	17	2	1	13	1	6	3	1	12
6	4	62	6	12	3504#	209	93	116	3	22	35	2	3	30	0	13	6	1	13
7	3	62	7	10	3414#	277	163	114	5	34	70	3	6	55	6	18	8	3	25
8	6	62	8	15	4546	284	127	157	3	32	46	2	2	37	5	15	14	3	14
9	4	62	9	13	3670	235	75	160	2	18	31	2	1	27	1	8	5	2	9

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN SUSQUEHANNA RIVER-NORTH BRANCH
STATION LOCATION SUSQUEHANNA RIVER AT
SAYRE, PENNSYLVANIA 76

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	18.5	-	7.8	-	-	-	-	-	-	98	118	5	10	-	-	-	1300
10	9	61	18.0	-	7.9	-	-	-	-	-	-	100	118	5	10	-	-	-	2500
10	16	61	14.0	-	8.0	-	-	-	-	-	18	104	120	5	10	27	.4	-	450
10	19	61	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-
10	23	61	9.5	-	8.4	-	-	-	-	-	-	115	126	5	10	29	-	171	5000
10	30	61	12.5	-	7.9	-	-	-	-	-	-	112	120	5	10	-	-	-	*50
11	6	61	12.5	-	7.7	-	-	-	-	-	23	108	120	5	10	27	.4	-	230
11	13	61	7.5	-	7.8	-	-	-	-	-	12	96	114	5	10	23	.1	-	*50
11	20	61	6.5	-	7.7	-	-	-	-	-	11	86	94	5	10	21	.1	-	*50
11	28	61	8.0	-	7.5	-	-	-	-	-	5	53	74	5	12	18	-	-	15000
12	4	61	5.0	-	7.6	-	-	-	-	-	-	53	72	5	12	19	.2	-	200
12	11	61	5.1	-	7.7	-	10	-	-	-	9	55	81	5	12	78	.1	-	*50
12	18	61	1.2	-	7.5	-	-	-	-	-	-	67	90	5	10	-	-	-	-
12	26	61	1.2	-	8.2	-	-	-	-	-	-	47	72	5	12	-	-	-	*50
1	2	62	1.0	-	7.7	-	-	-	-	-	-	58	82	5	10	-	-	-	-
1	8	62	1.0	-	7.1	-	30	-	-	-	-	28	48	10	190	-	-	-	3600
1	15	62	1.4	-	7.3	-	-	-	-	-	10	48	74	5	15	31	-	-	2800
1	22	62	1.8	-	7.4	-	-	-	-	-	6	52	70	5	15	18	-	81	*50
1	29	62	1.0	-	7.2	-	-	-	-	-	7	42	66	5	10	16	.2	-	50
2	5	62	.6	-	7.3	-	-	-	-	-	-	65	92	5	10	18	-	-	100
2	12	62	.6	-	7.2	-	15	-	-	-	-	58	82	10	10	-	-	-	50
2	19	62	.5	-	7.3	-	-	-	-	-	-	80	108	5	10	45	.1	-	91
2	26	62	.6	-	7.4	-	-	-	-	-	-	80	106	5	10	-	-	-	*50
3	5	62	.8	-	7.3	-	-	-	-	-	9	49	66	5	10	14	-	72	460
3	12	62	.9	-	7.2	-	24	-	-	-	-	49	68	5	35	-	-	-	300
3	19	62	2.2	-	7.5	-	-	-	-	-	-	41	58	5	25	-	-	-	250
3	26	62	5.0	-	7.4	-	-	-	-	-	-	30	46	10	35	-	-	-	*50
4	2	62	2.8	-	7.2	-	-	-	-	-	4	18	32	5	180	13	-	-	1600
4	9	62	6.0	-	7.4	-	-	-	-	-	8	27	38	5	65	18	.0	-	150
4	13	62	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
4	16	62	7.3	-	7.3	-	-	-	-	-	8	34	58	5	15	70	-	83	1300
4	23	62	10.1	-	7.4	-	-	-	-	-	-	42	60	5	10	-	-	-	*50
4	30	62	16.4	-	7.5	-	-	-	-	-	8	52	74	5	15	22	.0	-	200
5	7	62	13.2	-	7.3	-	-	-	-	-	7	48	74	5	15	22	-	-	910
5	14	62	13.6	-	7.8	-	-	-	-	-	5	57	90	5	10	7	.0	-	200
5	17	62	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-
5	21	62	20.9	-	7.9	-	-	-	-	-	11	75	104	5	10	33	-	-	350
5	28	62	19.2	-	8.5	-	-	-	-	-	-	-	114	5	10	26	-	-	1500
6	4	62	20.9	-	8.6	-	-	-	-	-	-	-	124	5	10	-	-	-	1300

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN SUSQUEHANNA RIVER-NORTH BRANCH
STATION LOCATION SUSQUEHANNA RIVER AT
SAYRE, PENNSYLVANIA 76

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	11	62	22.4	-	8.9	-	21	-	-	-	-	-	118	5	40	-	-	-	*50
6	18	62	22.6	-	8.8	-	-	-	-	-	-	82	104	5	30	-	-	-	50
6	25	62	22.2	-	8.9	-	-	-	-	-	-	92	126	5	20	26	.5	173	350
7	2	62	22.6	-	8.7	-	-	-	-	-	-	88	122	10	60	-	-	-	*50
7	9	62	24.3	-	8.8	-	-	-	-	-	-	493	132	5	25	25	.2	175	*50
7	16	62	21.9	-	8.8	-	-	-	-	-	20	99	130	5	25	33	.3	-	*50
7	23	62	22.0	-	8.2	-	-	-	-	-	13	95	132	5	20	20	-	144	20
7	30	62	20.6	-	8.6	-	-	-	-	-	-	98	136	5	20	-	-	-	*10
8	6	62	22.9	-	8.7	-	-	-	-	-	-	-	130	5	20	-	-	-	250
8	13	62	21.1	-	7.7	-	11	-	-	-	-	89	118	5	30	-	-	-	*10
8	20	62	20.2	-	9.0	-	-	-	-	-	-	87	96	20	35	-	-	-	670
8	27	62	22.2	-	8.4	-	-	-	-	-	-	85	96	20	20	-	-	-	73
9	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*50
9	4	62	21.0	-	8.5	-	-	-	-	-	-	85	97	10	20	-	-	-	-
9	10	62	19.0	-	7.9	-	15	-	-	-	23	105	120	10	25	29	.4	-	*50
9	17	62	18.2	-	7.8	-	-	-	-	-	-	104	116	5	25	-	-	-	*50
9	24	62	13.7	-	8.1	-	-	-	-	-	13	99	114	5	20	24	.2	180	100

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Waverly, New York
Operated by U.S. Geological Survey

STATE	Pennsylvania
MAJOR BASIN	North Atlantic
MINOR BASIN	Susquehanna River-North Branch
STATION LOCATION	Susquehanna River at Sayre, Pennsylvania

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.744	.660	3.300	2.800	3.200	9.400	61.200	15.100	1.640	.820	.463	.400
2	.732	.660	3.080	2.600	3.000	8.800	64.200	15.100	1.600	.808	.445	.392
3	.720	.636	3.030	2.800	3.000	7.800	52.500	14.100	1.550	.796	.427	.376
4	.806	.636	3.010	2.700	3.100	5.400	41.100	12.800	1.490	.724	.409	.376
5	.832	.672	2.990	3.100	3.800	4.800	28.300	11.200	1.440	.678	.400	.392
6	.858	.756	3.410	2.700	5.600	4.400	22.600	9.710	1.600	.667	.454	.418
7	.871	.884	4.260	14.500	6.400	3.900	25.200	8.720	1.810	.667	.436	.409
8	.949	1.070	4.400	27.200	6.600	3.800	44.200	8.130	2.580	.656	.472	.392
9	.923	1.200	3.940	22.600	4.900	3.900	42.300	7.930	2.440	.645	.560	.384
10	.845	1.260	3.460	14.200	3.500	4.000	34.200	7.400	1.870	.645	.872	.384
11	.832	1.200	3.200	9.700	3.100	4.800	26.500	6.660	1.560	.560	1.490	.418
12	.793	1.110	3.130	7.200	2.800	10.000	21.300	6.030	1.700	.560	2.070	.463
13	.732	.988	3.130	5.200	2.700	25.100	20.900	5.370	1.950	.580	1.640	.656
14	.720	1.010	3.500	5.000	2.700	33.000	23.000	4.900	1.890	.550	1.230	.645
15	.672	1.080	3.300	5.400	2.600	23.000	22.200	4.480	1.910	.530	1.020	.560
16	.672	1.330	2.700	12.500	2.400	15.700	19.600	4.260	1.620	.520	.911	.590
17	.660	1.590	2.300	16.000	2.350	11.900	17.100	4.120	1.420	.520	.808	.520
18	.672	1.860	2.170	12.200	2.300	10.800	15.800	3.930	1.280	.540	.724	.463
19	.672	2.010	2.990	8.800	2.250	10.900	16.800	3.480	1.200	.530	.689	.436
20	.696	1.970	4.580	6.200	2.100	12.500	16.900	3.220	1.110	.550	.645	.454
21	.684	1.880	6.320	6.000	2.050	13.600	16.000	3.020	1.030	.550	.601	.454
22	.636	1.640	6.000	5.900	2.100	20.800	14.400	2.870	.992	.550	.570	.427
23	.600	1.540	4.900	7.200	2.000	23.600	13.500	2.650	.950	.550	.530	.418
24	.576	1.750	4.400	8.800	1.900	22.500	13.000	2.630	.911	.550	.490	.409
25	.564	3.990	3.400	8.400	2.100	19.500	12.500	2.650	.898	.530	.472	.427
26	.576	6.600	3.500	6.600	2.300	18.100	11.200	2.490	.924	.520	.445	.454
27	.588	6.480	3.880	7.400	3.500	17.800	10.000	2.330	1.080	.500	.436	.463
28	.600	4.940	3.800	9.400	6.600	18.600	9.000	2.070	1.200	.490	.436	.796
29	.588	4.150	3.400	8.800		18.600	8.600	1.950	1.030	.510	.427	1.270
30	.600	3.690	3.000	6.200		20.600	10.600	1.810	.898	.490	.427	1.400
31	.612		3.000	4.100		31.100		1.680		.472	.418	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	TENNESSEE
MAJOR BASIN	TENNESSEE RIVER
MINOR BASIN	TENN. RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION	TENNESSEE RIVER AT
	PICKWICK LANDING, TENNESSEE 99

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	24	61	11	2	1	1	0	1	1	1	0	4	33	6	33	7						
11	7	61	11	22	0	0	0	1	0	1	3	4	27	5	30	6						
11	14	61	11	28	0	0	0	1	0	1	20	4	20	5	40	6						
11	21	61	12	4	0	0	0	1	0	1	0	4	13	5	13	6						
11	28	61	12	6	0	0	0	0	0	0	3	4	19	4	22	6						
12	5	61	12	14	0	0	0	1	0	1	4	5	23	6	27	8						
12	12	61	12	21	0	1	0	1	0	1	12	4	24	5	36	6						
12	19	61	1	2	1	1	0	1	1	1	27	5	51	5	78	7						
12	27	61	1	10	0	1	0	1	0	1	11	4	44	5	55	6						
1	9	62	1	18	0	1	0	0	0	1	50	5	57	5	107	7						
1	16	62	1	24	1	1	0	1	1	1	56	6	44	6	100	8						
1	23	62	2	2	0	0	0	1	0	1	15	4	38	5	53	6						
1	30	62	2	9	1	1	0	1	1	1	47	5	58	6	105	7						
2	6	62	2	19	0	1	0	1	0	1	47	5	51	5	98	7						
2	13	62	2	23	2	2	0	1	2	2	198	9	12	4	210	9						
2	20	62	3	5	1	1	0	1	1	1	83	6	50	5	133	8						
2	27	62	3	9	0	1	0	1	0	1	52	5	34	5	86	7						
3	8	62	3	20	1	1	0	1	1	1	27	5	40	5	67	7						
3	13	62	3	27	1	1	0	1	1	1	26	5	49	5	75	7						
3	20	62	3	29	0	1	0	0	0	1	26	4	35	5	61	6						
3	27	62	4	11	0	1	0	1	0	1	33	5	39	5	72	7						
4	3	62	4	17	0	1	0	0	0	1	35	4	39	5	74	6						
4	10	62	4	25	0	1	0	1	0	1	27	4	37	5	64	6						
4	17	62	4	30	1	1	0	1	1	1	31	5	42	7	73	9						
4	24	62	5	24	0	1	0	0	0	1	37	6	36	7	73	9						
5	1	62	6	5	1	1	0	0	1	1	17	5	26	6	43	7						
5	8	62	6	11	0	1	0	1	0	1	8	6	21	7	29	9						
5	14	62	6	19	1	1	0	1	1	1	7	5	27	6	34	8						
5	21	62	6	25	0	0	0	0	0	0	5	5	35	6	40	8						
5	29	62	6	29	1	1	0	1	1	1	27	6	38	6	65	8						
6	5	62	7	5	1	1	0	0	1	1	10	6	42	7	52	9						
6	12	62	7	13	0	0	0	0	0	0	6	3	44	4	50	5						
6	19	62	7	16	0	1	0	0	0	1	5	12	25	6	30	13						
6	26	62	8	3	0	1	0	1	0	1	5	3	33	4	38	5						
7	3	62	9	12	1	0	0	0	1	0	3	5	22	5	25	7						
7	9	62	8	6	0	0	0	0	0	0	3	6	26	6	29	8						
7	17	62	8	8	0	0	0	1	0	1	2	5	18	5	20	7						
7	24	62	8	24	1	1	0	1	1	1	22	6	17	5	39	7						
7	30	62	8	21	1	1	0	1	1	1	16	7	17	6	33	9						
8	7	62	8	27	0	0	0	0	0	0	8	4	0	7	8	10						
8	14	62	8	30	0	1	0	1	0	1	6	5	16	6	22	7						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE TENNESSEE

MAJOR BASIN TENNESSEE RIVER

MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION TENNESSEE RIVER AT

PICKWICK LANDING, TENNESSEE 99

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
8	21	62	9	6	2	2	0	0	2	2	11	12	22	6	33	13						
8	28	62	9	14	1	1	0	1	1	1	13	7	21	6	34	9						
9	5	62	9	28	-	-	-	-	-	-	25	7	27	6	52	9						
9	12	62	9	28	0	1	0	0	0	1	13	7	44	8	57	11						
9	19	62	10	10	2	2	0	1	2	2	18	13	52	8	70	15						
9	25	62	10	19	0	1	0	0	0	1	7	4	29	5	36	6						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
PICKWICK LANDING, TENNESSEE 99

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	24	61	300	0	0	0	0	210	0	60	20	20	0																				
11	14	61	100	0	0	0	0	0	0	60	20	0	20																				
11	28	61	00	0	0	0	0	0	0	0	0	0	0																				
12	13	61	300	0	0	0	0	40	0	230	60	100	40																				
12	27	61	200	0	0	20	0	0	0	80	60	80	60																				
1	16	62	200	0	0	0	0	70	0	90	20	50	70																				
2	6	62	200	0	0	0	0	0	0	90	90	0	0																				
2	20	62	400	0	0	0	0	310	20	0	20	0	20	57	2																		
3	8	62	100	0	0	0	0	0	0	60	20	20	0																				
3	20	62	100	0	0	0	0	20	20	0	20	40	40																				
4	3	62	300	0	0	0	0	0	40	150	100	20	20																				
4	17	62	300	20	0	20	100	20	20	80	60	20	40																				
5	8	62	9600	0	0	190	*	1240	20	1660	250	370	0	50	6	71	4	51	4														
5	21	62	2200	80	0	230	20	120	80	1300	390	390	40	68	3																		
6	5	62	1500	90	0	160	200	110	0	660	270	160	0	68	2	92	1	50	1	69	1												
6	19	62	2200	230	0	330	350	460	0	480	310	350	20	50	2	68	1	3	1	54	1	51	1	69	1	92	1						
7	3	62	2100	120	0	120	330	370	120	410	580	210	120	92	2	50	2	51	2	68	1												
7	17	62	1100	0	0	100	80	40	40	310	540	40	40	69	1	68	1	92	1														
8	7	62	700	0	20	80	130	120	0	80	250	40	40	32	1																		
8	21	62	2100	40	0	40	950	270	40	620	120	40	0	50	3	68	2	51	1														
9	5	62	1000	0	0	80	270	270	0	210	120	120	0	50	1	51	1																
9	19	62	1200	0	0	40	120	660	0	370	40	80	40	51	3	68	1																
*5	8	62					6210																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TENNESSEE

MAJOR BASIN TENNESSEE RIVER

MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION TENNESSEE RIVER AT

PICKWICK LANDING, TENNESSEE 099

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	24	61	82	27	56	16	23	8	57	5	44	0	0	24	22	1									4	51	1					0	0
11	14	61										0	0	2											0							0	0
11	28	61										0	0	0											1							0	0
12	13	61	10	33	56	13	57	7	92	6	41	0	0	0											0							0	0
12	27	61										0	0	0											0							0	0
1	16	62										20	10	2											0							0	0
2	6	62										0	0	0											0							0	0
2	20	62	57	13	82	10	58	7	92	6	64	0	0	0											0							0	0
3	8	62	62	14	57	9	97	8	86	7	62	0	0	0											0							0	0
3	20	62										0	0	0											0							0	0
4	3	62	62	29	92	11	57	5	82	5	50	0	0	0											0							0	0
4	17	62	62	27	61	9	27	9	71	7	48	0	0	0											1							0	0
5	8	62	82	73	56	8	57	8	70	2	9	0	0	15	21	1									3	51	1					0	0
5	21	62	27	51	92	9	57	4	28	3	33	20	0	1690	2	8	17	6	22	4	11	4	21	3	112	51	5	50	4	52	3	0	1
6	5	62	58	34	92	20	27	19	56	13	14	0	0	54	11	2	21	2	22	1					10	50	1					2	0
6	19	62	56	22	92	19	27	19	58	13	27	40	0	1120	17	6	2	6	11	6	22	5	21	5	30	50	4	51	1			1	6
7	3	62	92	58	56	10	58	7	32	4	21	0	0	52	17	2	11	2	22	1	16	1			4	50	1					5	2
7	17	62	27	36	58	18	92	11	71	7	28	0	0	265	17	4	1	4	46	4	21	4	2	2	97	50	5	76	1	51	1	3	0
8	7	62	27	44	32	12	28	9	71	5	30	0	0	357	17	5	2	4	15	3	22	3	18	3	18	50	3					6	3
8	21	62	26	32	27	30	82	13	23	8	17	0	0	1760	17	8	22	7	21	4	18	3	2	2	2							0	0
9	5	62	27	52	26	5	57	4	71	4	35	0	0	451	17	6	22	4	2	3	11	3	18	3	0							3	0
9	19	62	26	60	23	8	27	7	82	7	18	0	0	106	22	4	17	3	11	2	18	1	2	1	9	50	1	51	1	76	1	0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
PICKWICK LANDING, TENNESSEE 99

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	24	61	11	7	4520	159	53	106	2	11	21	4	2	15	0	6	4	1	8
12	12	61	12	27	2145	*	86	*	2	34	20	1	1	17	1	9	5	3	13
1	9	62	1	23	5095	175	64	111	4	16	14	1	1	12	0	6	5	1	18
2	13	62	2	27	4821	125	35	90	3	7	12	1	1	10	0	4	2	1	6
3	20	62	3	27	2440	173	51	122	5	13	14	2	2	10	0	5	3	1	10
4	17	62	4	24	4530	*	54	*	2	16	13	1	1	11	0	5	5	1	12
5	21	62	5	29	1581	244	99	145	3	30	26	4	2	19	1	10	11	2	17
6	12	62	6	19	4450	129	67	62	1	19	17	0	1	15	1	9	7	1	13
7	17	62	7	31	4330	155	51	104	1	12	16	1	1	13	1	10	3	1	8
8	14	62	8	28	5220	102	44	58	0	11	19	1	1	17	0	5	2	1	6
9	11	62	9	25	6220	145	36	109	0	8	13	1	1	10	1	3	4	1	7

* LABORATORY ACCIDENT

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
PICKWICK LANDING, TENNESSEE 99

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
11	7	61	-	-	-	-	-	-	-	-	31	38	72	5	-	15	-	-	-
11	28	61	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
12	12	61	-	-	-	-	-	-	-	-	20	48	72	-	-	-	-	-	-
12	19	61	-	-	-	-	-	-	-	-	15	48	64	-	175	16	-	-	-
1	2	62	-	-	-	-	-	-	-	-	10	44	72	5	-	17	-	-	-
2	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	11	.1	-	-
2	20	62	-	-	-	-	-	-	-	-	-	-	-	5	-	10	-	-	-
2	27	62	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
3	2	62	-	11.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	7	62	-	11.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	13	62	-	11.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	20	62	-	11.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	22	62	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-
3	27	62	-	11.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	3	62	-	10.1	-	-	-	-	-	-	7	16	64	5	-	11	-	62	-
4	12	62	-	9.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	17	62	-	9.8	-	-	-	-	-	-	5	-	-	5	-	-	.0	-	-
4	21	62	-	-	-	-	-	-	-	-	8	-	64	5	-	17	.0	-	-
4	24	62	-	9.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	1	62	-	8.8	-	-	-	-	-	-	5	52	60	5	275	10	.0	-	-
5	6	62	-	-	-	-	-	-	-	-	5	50	64	5	0	13	-	-	-
5	8	62	-	9.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	15	62	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	21	62	-	-	-	-	-	-	-	-	6	-	-	-	-	10	-	72	-
5	22	62	-	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	29	62	-	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	5	62	-	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	12	62	-	8.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	19	62	-	8.0	7.8	-	-	-	-	-	3	86	80	5	*25	11	.0	66	-
6	26	62	-	7.0	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
7	3	62	-	7.2	-	-	-	-	-	-	7	50	72	5	*25	-	-	-	-
7	10	62	-	6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	17	62	-	5.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	24	62	-	6.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	31	62	-	7.0	-	-	-	-	-	-	8	28	56	5	25	10	-	50	-
8	7	62	-	6.8	-	-	-	-	-	-	9	48	68	5	25	17	-	-	-
8	14	62	-	6.8	-	-	-	-	-	-	9	-	80	5	25	17	-	-	-
8	21	62	-	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	28	62	-	6.3	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TENNESSEE

MAJOR BASIN TENNESSEE RIVER

MINOR BASIN TENN. RIVER-MAIN STEM + MINOR TRIB.

STATION LOCATION TENNESSEE RIVER AT
PICKWICK LANDING, TENNESSEE 99

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
9	4	62	-	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	11	62	-	6.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	18	62	-	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	19	62	-	-	-	-	-	-	-	-	12	52	64	0	117	-	-	93	-
9	25	62	-	6.6	7.8	-	-	-	-	-	12	52	-	0	*25	16	-	107	-
9	26	62	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Savannah, Tennessee
Data Furnished by Tennessee Valley Authority
through U.S. Geological Survey

STATE	Tennessee
MAJOR BASIN	Tennessee River
MINOR BASIN	Tennessee River-Main Stem & Minor Trib.
STATION LOCATION	Tennessee River at Pickwick Landing, Tennessee

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	22.600	35.300	30.600	95.300	273.000	326.000	87.800	56.400	49.800	31.200	28.300	31.100
2	46.300	35.000	34.100	80.900	266.000	328.000	81.000	48.800	39.800	44.200	33.200	31.600
3	47.700	38.900	29.800	68.200	231.000	315.000	76.900	47.000	28.500	38.600	34.600	29.200
4	48.400	35.900	38.400	71.600	186.000	296.000	65.200	47.200	39.200	25.900	46.500	36.200
5	28.300	33.600	40.000	84.000	166.000	273.000	60.200	46.300	48.300	33.600	35.300	32.300
6	32.400	42.300	39.000	131.000	140.000	226.000	73.400	52.200	41.200	40.600	34.300	30.900
7	38.100	40.100	38.200	149.000	115.000	203.000	86.000	51.900	37.900	53.400	31.000	32.500
8	30.700	36.800	35.000	147.000	97.800	187.000	72.800	49.100	39.600	55.200	34.900	28.800
9	42.100	40.400	41.000	141.000	73.400	175.000	85.800	44.900	42.900	46.700	38.600	37.000
10	25.600	37.900	72.100	121.000	71.700	170.000	86.300	44.400	33.000	44.000	42.400	37.100
11	30.700	32.300	96.100	92.300	62.400	176.000	103.000	46.300	37.100	38.200	41.800	37.200
12	42.000	28.300	142.000	84.200	66.800	177.000	193.000	44.000	38.600	39.200	23.800	27.800
13	42.500	43.600	171.000	74.100	67.200	165.000	219.000	42.200	48.300	41.300	37.700	25.900
14	21.700	41.500	192.000	63.900	58.400	152.000	210.000	42.200	43.400	48.200	25.700	33.400
15	25.900	38.300	189.000	85.900	65.600	143.000	193.000	39.400	38.300	41.700	26.500	32.400
16	40.000	24.500	184.000	92.100	76.100	125.000	164.000	44.000	37.400	42.900	24.100	27.300
17	31.100	57.400	199.000	74.500	54.000	106.000	140.000	44.800	36.800	35.900	19.400	33.300
18	33.300	43.300	241.000	74.700	55.900	91.000	111.000	49.900	46.100	33.900	43.400	40.300
19	31.400	31.300	270.000	83.700	65.700	87.700	90.300	32.500	46.100	37.400	36.800	37.100
20	44.500	39.800	285.000	78.300	76.200	85.100	88.800	32.000	44.200	33.100	28.400	37.600
21	35.600	36.800	290.000	75.200	71.000	82.900	78.400	39.400	50.300	48.700	24.800	35.100
22	28.800	38.000	285.000	77.000	86.900	82.700	74.400	28.600	48.600	38.300	23.200	30.800
23	35.100	35.400	259.000	88.700	123.000	83.100	69.300	39.500	45.800	33.500	28.800	21.900
24	39.500	54.000	217.000	108.000	191.000	82.200	56.300	34.400	46.800	32.600	23.100	34.600
25	36.700	38.400	185.000	130.000	253.000	83.400	56.500	26.500	43.400	31.600	45.000	27.200
26	36.800	28.700	155.000	170.000	278.000	92.900	60.400	37.400	37.300	44.100	36.900	26.000
27	42.200	44.200	143.000	196.000	303.000	95.800	60.900	35.500	31.600	43.600	36.400	30.000
28	43.200	37.000	121.000	227.000	319.000	87.400	65.400	40.000	34.700	44.500	31.400	28.400
29	29.900	35.300	93.800	256.000		72.500	54.400	39.900	49.700	42.500	26.100	28.300
30	33.800	33.100	93.100	268.000		64.600	61.900	31.000	51.500	33.000	26.700	25.600
31	33.200		98.400	270.000		64.600		34.400		35.900	29.400	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ALABAMA

MAJOR BASIN TENNESSEE RIVER

MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION TENNESSEE RIVER AT

BRIDGEPORT, ALABAMA 77

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE		CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	11	61	100	0	0	20	0	20	0	0	20		0	0																				
11	8	61	00	0	0	0	0	0	0	20	0		0	0																				
11	22	61	200	50	0	0	0	20	20	70	0		20	0																				
12	6	61	100	0	0	0	0	40	0	20	0		0	0																				
12	21	61	200	0	0	0	0	80	0	20	100		0	60																				
1	3	62	300	0	0	0	0	50	50	110	140		50	0																				
1	17	62	200	0	0	0	0	0	50	110	90		20	110																				
1	31	62	200	0	0	0	0	0	0	90	140		50	20																				
2	14	62	300	0	0	0	0	0	0	150	150		0	40																				
2	28	62	500	0	0	0	0	40	20	250	170		40	100	69	1																		
3	14	62	200	0	0	0	0	0	0	60	120		0	60																				
3	28	62	200	0	0	0	0	0	40	60	150		40	20																				
4	11	62	200	0	0	0	0	50	0	70	50		0	20																				
5	9	62	500	0	0	40	0	0	0	210	270		170	40																				
5	23	62	300	0	0	20	0	0	0	170	150		0	60																				
6	6	62	200	0	0	50	0	0	0	110	20		0	20																				
6	20	62	900	0	0	40	0	0	0	680	210		210	40	69	2																		
7	5	62	15200	15030	0	0	0	40	0	40	40		0	0	3	3																		
7	19	62	00	0	0	0	0	0	0	0	40		0	0																				
8	1	62	00	0	0	0	0	0	0	0	40		20	0																				
8	15	62	2300	0	0	0	40	60	40	1330	790		210	370	68	4																		
8	29	62	00	0	0	0	0	0	0	0	0		0	0																				
9	12	62	00	0	0	0	0	0	0	20	0		10	0																				
9	26	62	00	0	0	10	0	0	0	20	0		0	0																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE ALABAMA

MAJOR BASIN TENNESSEE RIVER

MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION TENNESSEE RIVER AT

BRIDGEPORT, ALABAMA 077

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH		OTHER SPECIES PERCENT		PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	11	61	27	23	82	12	56	11	23	6	48	0	0	0											0							0	0
11	8	61	10	13	62	9	56	9	16	7	62	0	0	1											0							0	0
11	22	61										50	0	0											0							0	0
12	6	61										20	0	1											0							0	0
12	21	61	47	13	83	12	56	7	92	5	63	0	0	0											0							0	0
1	3	62	57	14	56	9	2	7	71	4	66	20	10	0											0							0	0
1	17	62	83	22	57	9	62	8	92	4	57	410	0	0											0							0	0
1	31	62	57	19	58	5	92	5	56	3	68	30	0	1											0							0	0
2	14	62										0	0	0											2							0	0
2	28	62	62	10	61	6	96	5	83	4	75	20	0	0											0							0	0
3	14	62	27	14	61	9	71	6	2	6	65	0	0	0											0							0	0
3	28	62	61	10	57	8	64	6	82	6	70	0	0	0											0							0	0
4	11	62	61	21	62	7	64	7	65	3	62	0	0	1											0							1	0
5	9	62	61	23	92	16	58	5	71	4	52	0	0	0											19	51	3					0	1
5	23	62	62	9	61	8	71	8	92	7	68	20	0	1											1							1	0
6	6	62	56	22	33	10	47	9	62	6	53	0	0	0											0							0	0
6	20	62	56	29	57	17	92	11	58	7	36	0	0	65	22	4	17	2							1							0	0
7	5	62	92	11	56	9	58	7	10	6	67	0	0	7	17	1									1							0	0
7	19	62	56	17	71	10	16	7	92	5	61	0	0	2											2							0	0
8	1	62	56	18	27	17	92	8	71	8	49	0	0	24	11	2									2							0	0
8	15	62	28	17	56	17	16	9	57	9	48	0	0	26	11	1	22	1							0							0	0
8	29	62	57	21	27	10	92	7	71	6	56	0	0	0											0							0	0
9	12	62	57	49	82	10	56	9	92	4	28	0	0	0											0							0	0
9	26	62	57	20	27	13	16	11	92	8	48	0	0	5											0							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE	ALABAMA
MAJOR BASIN	TENNESSEE RIVER
MINOR BASIN	TENN. RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION	TENNESSEE RIVER AT BRIDGEPORT, ALABAMA

77

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	11	61	10	30	0	0	0	1	0	1	6	4	26	5	32	6						
10	25	61	11	3	0	0	0	1	0	1	0	4	9	5	9	6						
11	8	61	11	22	0	0	0	0	0	0	0	5	11	6	11	8						
11	22	61	12	1	0	0	0	1	0	1	7	4	26	5	33	6						
12	6	61	12	14	0	1	0	1	0	1	12	4	50	6	62	7						
12	21	61	1	2	0	1	0	1	0	1	18	5	51	5	69	7						
1	3	62	1	11	-	-	-	-	-	-	10	5	21	6	31	8						
1	17	62	1	26	0	0	0	0	0	0	27	5	43	6	70	8						
1	31	62	2	12	-	-	-	-	-	-	59	7	56	6	115	9						
2	14	62	2	27	-	-	-	-	-	-	15	5	23	6	38	8						
2	28	62	3	13	2	1	0	1	2	1	65	6	77	6	142	8						
3	14	62	3	26	-	-	-	-	-	-	24	5	35	5	59	7						
3	28	62	4	6	0	1	0	1	0	1	10	4	19	5	29	6						
4	11	62	4	26	-	-	-	-	-	-	12	5	37	6	49	7						
4	25	62	5	28	0	1	0	0	0	1	2	7	67	5	69	9						
5	9	62	6	19	-	-	-	-	-	-	6	6	48	7	54	9						
5	23	62	6	27	0	0	0	0	0	0	1	5	29	6	30	8						
6	6	62	7	6	-	-	-	-	-	-	5	6	26	8	31	10						
6	20	52	8	6	0	0	0	0	0	0	2	6	24	7	26	9						
7	5	62	8	3	-	-	-	-	-	-	1	3	32	3	33	4						
7	19	62	8	7	0	0	0	1	0	0	16	5	45	7	61	9						
8	1	62	8	22	-	-	-	-	-	-	1	5	71	7	72	9						
8	15	62	8	30	-	-	-	-	-	-	4	5	24	6	28	7						
8	29	62	9	17	0	1	0	1	0	1	9	7	26	8	35	11						
9	12	62	10	8	-	-	-	-	-	-	3	6	9	7	12	9						
9	20	62	10	24	0	0	0	1	0	1	3	6	17	7	20	9						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE ALABAMA
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
BRIDGEPORT, ALABAMA 77

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	12	61	10	20	5325	171	48	123	1	13	17	2	1	13	1	5	4	1	7
11	9	61	11	17	5010	139	51	88	1	12	15	1	1	12	1	6	5	1	11
11	17	61	11	26	5700	162	43	119	1	10	14	1	1	11	1	5	3	1	9
12	12	61	12	20	5246	122	55	67	1	13	15	2	1	11	1	7	5	1	13
12	20	61	12	28	5159	133	40	93	2	13	11	1	1	8	1	4	3	0	7
2	1	62	2	9	5060	91	22	69	1	6	7	1	1	5	0	2	1	1	4
2	9	62	2	17	5045	120	35	85	2	10	10	1	1	7	1	4	2	0	7
3	1	62	3	9	5045	86	29	57	1	8	8	1	1	6	0	4	2	1	5
3	16	62	3	28	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	12	62	4	20	5065	97	38	59	2	10	11	2	1	8	0	4	3	1	7
4	26	62	5	7	5795	110	48	62	2	14	12	2	1	9	0	5	5	1	9
6	7	62	6	16	5190	114	51	63	1	12	16	1	1	12	2	6	5	0	11
7	6	62	7	14	5050	103	54	49	1	16	16	2	1	12	1	6	5	1	9
8	2	62	8	10	5030	124	53	71	1	13	15	3	1	10	1	6	4	1	13
8	30	62	9	7	5000	88	31	57	0	7	13	2	1	9	1	4	2	1	4

* FLOW DATA UNKNOWN

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ALABAMA

MAJOR BASIN TENNESSEE RIVER

MINOR BASIN TENN. RIVER-MAIN STEM + MINOR TRIB.

STATION LOCATION TENNESSEE RIVER AT

BRIDGEPORT, ALABAMA 77

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	11	61	19.3	6.4	7.5	1.4	11	1.5	3.1	.0	18	49	70	5	10	17	-	122	1800
10	25	61	17.6	7.2	7.2	3.4	19	1.5	3.0	.0	17	50	73	10	9	20	-	100	5000
11	8	61	15.3	7.8	7.2	.9	23	1.6	3.6	.0	19	50	76	10	10	14	-	134	-
11	22	61	12.9	-	7.5	1.4	31	1.8	3.8	.0	21	53	83	10	9	15	.1	140	4300
12	6	61	11.6	8.7	7.3	1.6	21	1.4	3.0	.0	23	51	74	10	11	18	.1	118	-
12	21	61	9.6	10.2	7.2	2.9	26	2.2	6.0	.0	8	32	43	10	90	10	-	72	3500
1	3	62	6.8	11.7	7.3	1.2	18	1.7	4.1	.0	14	43	63	15	30	17	-	110	2800
1	17	62	4.8	11.1	7.5	1.9	18	2.8	-	.0	12	34	58	10	17	17	-	98	-
1	31	62	8.6	11.6	7.2	1.1	22	2.0	3.8	.0	9	37	48	5	29	13	-	103	2500
2	5	62	-	-	-	-	-	-	-	-	5	-	-	-	-	13	-	-	-
2	14	62	9.8	11.0	7.2	.3	21	2.0	3.5	.0	14	35	73	.5	28	15	-	86	*330
2	28	62	11.4	10.9	7.3	.7	20	1.7	3.6	.0	6	39	51	5	48	16	-	82	6000
3	14	62	8.4	11.8	7.3	-	25	1.7	3.6	.0	5	38	60	10	26	21	-	90	1900
3	28	62	11.3	9.9	7.2	1.9	20	1.2	2.7	.0	6	52	64	15	30	18	-	87	1700
4	11	62	-	8.8	7.4	1.1	15	1.4	2.6	.0	5	48	58	10	27	16	-	84	*330
4	25	62	15.1	9.0	7.2	1.2	17	1.3	2.5	.0	5	41	50	5	19	16	-	76	1300
5	9	62	20.3	9.8	7.4	1.4	17	1.3	3.4	.0	6	50	56	5	18	13	-	76	2800
5	23	62	23.9	6.1	7.4	.8	19	1.6	3.3	.0	4	52	64	5	17	15	-	78	1800
6	6	62	23.6	4.6	7.3	2.0	6	1.4	2.5	.0	6	51	60	5	14	14	-	82	4200
6	20	62	24.8	5.4	7.4	1.1	9	1.6	2.9	.0	9	53	65	5	10	16	-	70	1600
7	5	62	25.5	5.2	7.4	.8	11	1.3	2.3	.0	10	55	68	10	11	16	-	92	840
7	19	62	27.0	4.8	7.5	.7	9	1.1	2.5	.0	11	52	61	5	25	21	-	94	4500
8	1	62	25.5	4.6	8.0	-	12	1.6	2.9	.0	8	56	72	5	*25	16	-	100	3800
8	15	62	26.4	5.0	7.4	.6	8	1.2	2.7	.0	15	52	74	5	13	14	-	100	2600
8	29	62	25.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
9	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600
9	20	62	-	-	8.0	-	-	-	-	-	19	56	112	0	*25	23	.0	-	-
9	26	62	22.2	5.7	7.6	.7	10	1.6	3.2	.0	21	59	77	0	9	17	-	144	4600

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Hales Bar near Chattanooga, Tennessee
Operated by U.S. Geological Survey

STATE Alabama

MAJOR BASIN Tennessee River

MINOR BASIN Tennessee River-Main Stem & Minor Trib.

STATION LOCATION Tennessee River at
Bridgeport, Alabama

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	22.300	33.800	25.500	49.500	128.000	167.000	36.100	40.000	25.900	31.700	30.100	28.000
2	29.500	37.300	34.100	48.300	103.000	149.000	39.400	35.300	28.500	28.300	31.200	16.100
3	38.300	42.000	23.600	44.800	81.200	137.000	33.700	36.700	27.800	29.900	30.300	23.300
4	40.900	37.000	27.200	48.900	78.800	134.000	22.500	30.700	29.100	31.400	32.800	28.200
5	40.900	13.600	35.800	52.500	77.400	125.000	24.900	30.900	29.100	34.700	26.100	26.300
6	41.100	32.300	38.100	60.200	71.400	115.000	31.700	31.200	28.700	34.500	30.300	26.900
7	29.000	40.100	36.400	72.800	53.000	103.000	32.900	35.400	28.500	35.300	30.400	27.900
8	22.000	37.500	37.100	65.000	54.000	92.800	18.400	38.800	28.400	24.400	31.800	27.200
9	26.400	39.700	32.000	59.700	56.800	86.400	31.900	39.200	28.900	29.700	35.400	21.300
10	37.800	38.700	31.200	51.700	60.200	96.600	33.400	41.100	29.600	35.600	31.100	30.400
11	39.900	29.200	56.200	52.800	55.900	94.400	36.900	40.400	29.300	36.000	29.600	27.900
12	29.200	24.000	108.000	54.100	51.700	98.700	71.500	33.100	29.700	35.800	15.200	27.300
13	32.300	25.400	152.000	52.200	51.700	90.300	103.000	21.100	29.800	38.100	32.400	26.800
14	30.900	30.700	129.000	42.600	44.800	87.200	79.000	27.600	30.000	38.600	29.100	25.400
15	29.900	33.100	71.100	43.800	44.500	81.700	52.800	35.200	29.400	27.800	25.800	25.500
16	39.900	33.400	42.800	46.200	45.000	73.400	54.200	34.200	29.500	38.300	34.800	21.900
17	31.700	30.100	104.000	43.800	44.600	69.800	65.300	39.100	29.500	35.200	37.000	26.900
18	35.200	29.700	169.000	38.800	44.000	69.100	49.600	38.000	29.400	33.300	24.800	24.800
19	35.100	32.500	183.000	43.000	44.200	61.600	42.900	31.900	29.600	33.100	13.800	23.600
20	40.600	32.600	178.000	45.700	43.000	49.200	42.800	18.500	29.700	23.400	21.200	24.700
21	40.700	32.600	142.000	41.900	41.100	58.400	44.800	28.100	30.200	36.100	24.100	28.500
22	32.300	32.600	111.000	45.000	59.400	83.300	42.100	27.500	29.400	29.700	30.000	32.500
23	34.600	32.000	95.700	55.000	117.000	83.100	40.000	26.900	29.800	33.100	37.500	17.500
24	34.100	29.800	84.800	78.800	178.000	69.900	39.000	28.000	29.700	32.800	31.600	27.100
25	35.500	30.300	84.500	105.000	181.000	61.300	39.000	28.800	27.800	29.400	20.900	23.400
26	36.000	21.600	83.300	118.000	178.000	44.600	40.600	28.500	28.800	32.500	15.200	21.800
27	41.800	29.200	78.000	144.000	176.000	44.400	39.900	26.200	29.000	34.400	26.300	23.600
28	43.600	35.700	76.000	165.000	175.000	44.200	40.100	28.600	29.200	32.000	27.600	27.000
29	15.800	35.600	78.500	175.000		41.800	34.700	28.500	28.900	22.600	26.300	27.600
30	38.700	29.000	74.400	167.000		38.200	39.200	28.500	32.200	29.300	28.700	19.800
31	32.700		65.300	153.000		37.500		29.100		31.500	28.600	

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
CHATTANOOGA, TENNESSEE 51

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	400	0	0	80	0	20	20	190	60	0	20																				
10	16	61	200	0	0	0	0	40	0	170	20	20	0																				
11	6	61	100	0	0	0	0	0	20	100	0	80	20																				
11	20	61	200	0	0	20	0	20	0	100	60	0	0																				
12	4	61	100	0	0	0	0	40	0	80	20	20	20																				
12	18	61	100	0	0	0	0	0	0	100	40	0	40																				
1	2	62	700	0	0	20	0	50	70	140	470	20	160	88	1																		
1	15	62	00	0	0	0	0	0	0	50	0	50	70																				
2	5	62	00	0	0	0	0	0	20	0	20	70	110																				
2	19	62	600	60	0	20	0	120	60	250	120	20	60																				
3	5	62	100	0	0	0	20	0	0	20	110	0	40																				
3	19	62	500	60	0	20	0	40	40	230	60	40	20																				
4	2	62	500	20	0	0	0	80	0	80	270	0	100																				
4	16	62	800	150	0	150	0	20	20	270	170	190	130	69	1																		
5	7	62	1000	0	40	60	0	20	230	650	20	420	190	71	2	69	1	60	1														
5	21	62	700	20	0	20	0	80	20	390	210	0	0	69	2																		
6	4	62	500	0	0	0	0	150	0	130	250	130	40																				
6	18	62	500	0	0	40	0	80	20	270	80	60	40	69	1																		
7	2	62	1000	40	0	80	0	100	40	210	480	40	150	92	1	84	1																
7	16	62	600	0	0	140	0	60	0	250	120	0	40																				
8	6	62	1300	0	0	130	0	40	0	510	630	40	210	68	2	73	1	69	1														
8	20	62	500	60	0	40	0	40	80	120	120	40	0																				
9	6	62	3100	0	620	1160	0	270	0	210	830	0	40	25	3	17	3	2	1	38	1	51	1	92	1								
9	17	62	400	10	80	200	0	10	0	60	70	140	80																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TENNESSEE

MAJOR BASIN TENNESSEE RIVER

MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION TENNESSEE RIVER AT
CHATTANOOGA, TENNESSEE 051

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA								
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT			NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NUMBER PER LITER	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
10	2	61	56	28	58	13	57	11	23	8	40	0	10	12	11	1									0							0	0
10	16	61	56	32	58	12	57	10	82	6	40	0	0	7	11	2									0							0	0
11	6	61										0	0	0											0							0	0
11	20	61	56	34	57	13	82	9	58	8	36	0	0	0											0							0	0
12	4	61	80	23	56	22	57	15	58	6	34	20	0	5											1							0	0
12	18	61	56	23	62	11	83	9	16	6	51	0	0	4											0							0	0
1	2	62	57	14	27	14	71	9	56	9	54	70	0	1											0							0	0
1	15	62	57	26	83	10	82	6	56	6	52	0	0	4											0							2	0
2	5	62	61	16	57	14	56	9	58	7	54	20	10	6											1							0	0
2	19	62	57	12	92	8	58	7	65	6	67	40	0	1											0							1	0
3	5	62	62	11	61	8	71	6	27	5	70	0	10	0											0							1	0
3	19	62	61	15	56	9	57	7	58	7	62	40	10	0											0							0	0
4	2	62	61	31	62	14	92	13	56	8	34	0	0	3											0							0	2
4	16	62	61	75	56	4	92	4	86	2	15	20	0	3											1							1	0
5	7	62	61	63	56	22	57	6	58	4	5	0	0	14	11	1									10	51	2	50	1			0	0
5	21	62	58	30	56	23	61	23	47	10	14	0	0	5											2							0	0
6	4	62	47	28	56	24	58	16	61	9	23	0	10	16	11	1									4	51	1					0	0
6	18	62	56	54	58	13	92	8	47	8	17	0	0	10	11	1									0							0	0
7	2	62	56	36	92	20	47	14	58	8	22	20	0	6											1							0	0
7	16	62	56	40	58	10	92	8	57	6	36	0	0	12	11	1									0							0	0
8	6	62	27	68	28	9	58	5	1	3	15	0	0	115	11	4	17	2	22	2	16	1	7	1	0							0	0
8	20	62	2	14	57	12	91	11	58	8	55	0	0	96	11	3	17	3	22	2	15	1	16	1	3	50	1					0	1
9	17	62	56	30	57	15	58	8	92	6	41	0	0	160	17	4	11	4	18	2	22	2	16	1	3	50	1					0	0
9	6	62	56	26	57	12	2	11	58	8	43	0	0	258	11	5	17	5	15	2	18	2	22	2	0							0	0

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
CHATTANOOGA, TENNESSEE 51

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	4	61	10	14	-	-	-	-	-	-	2	5	17	7	19	9						
10	18	61	10	31	-	-	-	-	-	-	3	5	11	6	14	8						
11	1	61	11	13	-	-	-	-	-	-	5	5	15	6	20	8						
11	15	61	11	28	0	0	0	1	0	1	1	5	14	6	15	8						
11	29	61	12	7	0	1	0	1	0	1	11	5	64	7	75	9						
12	13	61	12	20	4	2	0	1	4	2	93	7	53	5	146	9						
12	27	61	1	5	-	-	-	-	-	-	15	6	54	6	69	8						
1	10	62	1	22	0	0	0	1	0	1	24	4	53	5	77	8						
1	24	62	2	5	-	-	-	-	-	-	23	6	49	6	72	8						
2	7	62	2	15	-	-	-	-	-	-	26	5	37	6	63	8						
2	21	62	3	5	1	1	0	1	1	1	31	4	59	5	90	6						
3	7	62	3	15	-	-	-	-	-	-	14	6	24	6	38	8						
3	21	62	4	2	0	1	0	1	0	1	19	4	36	5	55	6						
4	4	62	4	19	-	-	-	-	-	-	21	4	43	5	64	6						
4	18	62	4	30	1	1	0	1	1	1	28	5	71	6	99	7						
5	2	62	6	1	-	-	-	-	-	-	11	8	12	7	23	11						
5	16	62	6	22	0	0	0	0	0	0	0	6	30	7	30	9						
6	13	62	7	10	0	0	0	0	0	0	0	5	18	6	18	7						
6	27	62	7	24	-	-	-	-	-	-	28	6	4	5	32	7						
7	11	62	8	10	0	0	0	0	0	0	0	3	33	3	33	4						
7	25	62	8	21	-	-	-	-	-	-	4	5	53	6	57	7						
8	8	62	8	27	-	-	-	-	-	-	3	3	33	3	36	4						
8	22	62	9	6	0	0	0	1	0	1	4	6	29	8	33	10						
9	5	62	9	23	-	-	-	-	-	-	1	6	14	7	15	9						
9	19	62	10	10	0	0	1	1	1	1	9	5	27	6	36	7						

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE TENNESSFE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STFM & MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
CHATTANOOGA, TENNESSEE 51

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	11	61	10	18	3960	164	38	126	-	-	-	-	-	-	-	-	-	-	-
11	8	61	11	15	4400	143	44	99	-	-	-	-	-	-	-	-	-	-	-
12	13	61	12	20	3150	205	64	141	-	-	-	-	-	-	-	-	-	-	-
12	13	61		*	11510	167	47	120	2	14	12	1	1	10	0	5	3	1	10
1	19	62	1	26	3050	167	57	110	-	-	-	-	-	-	-	-	-	-	-
2	14	62	2	21	3110	186	47	139	-	-	-	-	-	-	-	-	-	-	-
3	14	62	3	21	3080	154	35	119	-	-	-	-	-	-	-	-	-	-	-
3	14	62		*	9240	170	47	123	3	11	15	2	1	12	0	6	3	1	8
4	11	62	4	18	3570	112	45	67	-	-	-	-	-	-	-	-	-	-	-
5	9	62	5	16	3360	147	77	70	-	-	-	-	-	-	-	-	-	-	-
6	13	62	6	20	4190	124	57	67	-	-	-	-	-	-	-	-	-	-	-
6	13	62		*	11120	127	59	68	2	16	15	2	1	11	1	6	5	1	14
7	12	62	7	18	4360	142	53	89	-	-	-	-	-	-	-	-	-	-	-
8	8	62	8	15	4580	114	40	74	-	-	-	-	-	-	-	-	-	-	-
9	12	62	9	19	4740	126	45	81	-	-	-	-	-	-	-	-	-	-	-
9	12	62		*	13680	127	46	81	1	13	13	1	1	10	1	6	5	0	8

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STEM + MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
CHATTANOOGA, TENNESSEE 51

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
[illegible]	3	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1200
1[illegible]	4	61	21.3	6.6	7.4	1.3	22	1.1	3.1	.0	17	50	72	3	12	17	-	123	-
10	18	61	19.6	7.4	7.4	3.1	27	1.3	-	.0	16	41	70	4	10	18	-	113	-
10	31	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2000
11	1	61	17.4	7.5	7.4	2.1	21	1.5	2.5	.0	16	44	72	5	10	17	-	115	-
11	14	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2300
11	15	61	16.7	-	7.4	-	-	-	-	-	17	50	76	5	10	21	.2	113	-
11	28	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1900
11	29	61	12.3	8.7	7.4	1.1	22	1.4	3.3	.0	20	50	78	5	15	21	-	115	-
12	6	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000
12	12	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52000
12	13	61	11.2	9.0	7.2	4.1	29	2.6	7.0	.0	12	34	52	15	131	12	.2	85	-
12	26	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*100
12	27	61	8.4	10.4	7.1	1.8	21	2.0	5.4	.0	4	34	46	8	61	13	-	102	-
1	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240000
1	10	62	5.6	-	7.3	-	-	-	-	-	9	42	60	7	38	-	-	-	-
1	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32000
1	24	62	6.7	10.9	7.4	1.2	23	1.6	3.6	.0	7	48	68	9	43	15	.0	107	-
2	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9700
2	7	62	7.8	10.5	7.3	1.3	21	1.1	1.6	.0	7	50	68	6	32	28	-	98	-
2	10	62	-	11.0	-	1.9	20	2.4	4.4	.0	9	-	-	-	-	11	-	102	-
2	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3200
2	21	62	9.5	10.1	7.4	3.5	19	1.5	3.7	.0	6	52	72	5	21	18	.0	102	-
3	6	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	460
3	7	62	8.9	10.7	7.3	.6	12	1.2	2.9	.0	5	42	60	6	23	15	-	91	-
3	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1600
3	21	62	10.6	10.2	7.3	.9	19	1.1	2.8	.0	7	55	72	4	30	19	-	113	-
3	21	62	-	-	-	-	-	-	-	-	-	-	-	-	-	12	.0	96	-
4	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4800
4	4	62	12.3	9.4	7.3	2.0	18	1.4	3.0	.0	4	53	76	3	26	12	-	86	-
4	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24000
4	18	62	12.9	9.5	7.3	1.5	22	1.0	2.8	.0	3	41	60	7	24	17	-	-	-
5	1	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1600
5	2	62	20.2	8.2	7.4	1.2	18	1.2	3.0	.0	2	41	54	9	15	13	.0	80	-
5	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1300
5	16	62	21.3	7.1	7.4	5.0	24	1.2	2.8	.0	1	47	58	5	15	14	.0	91	-
5	31	62	-	5.4	-	1.0	9	1.5	3.2	.0	3	-	-	-	-	14	-	90	-
6	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2800
6	13	62	24.8	4.9	7.3	1.3	15	1.5	3.0	.0	7	55	74	5	36	16	-	98	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TENNESSEE

MAJOR BASIN TENNESSEE RIVER

MINOR BASIN TENN. RIVER-MAIN STEM + MINOR TRIB.

STATION LOCATION TENNESSEE RIVER AT

CHATTANOOGA, TENNESSEE 51

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
6	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400
6	27	62	-	5.2	-	.8	11	1.1	2.8	.0	5	-	-	-	-	15	.0	109	-
6	28	62	24.8	-	7.4	-	-	-	-	-	5	54	74	5	17	-	.0	-	-
7	10	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4100
7	11	62	25.2	5.1	7.4	1.4	14	1.2	2.4	.0	7	47	70	5	34	15	-	96	-
7	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600
7	25	62	26.3	4.8	7.4	1.6	12	1.5	2.9	.0	7	53	70	5	17	24	-	102	-
8	5	62	26.9	-	7.4	-	-	-	-	-	13	52	74	5	20	-	-	-	-
8	8	62	26.9	5.2	7.4	1.0	9	1.2	3.3	.0	10	56	76	5	25	14	-	116	400
8	21	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500
8	22	62	26.3	4.3	7.4	.8	8	1.1	2.9	.0	11	51	76	5	16	15	-	117	-
9	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
9	5	62	-	5.8	-	1.1	12	1.4	3.8	.0	13	-	-	-	-	16	-	131	-
9	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500
9	19	62	25.2	6.6	7.5	2.3	11	1.6	4.1	.0	16	52	78	5	20	15	-	142	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Chattanooga, Tennessee
Operated by U.S. Geological Survey

STATE Tennessee
MAJOR BASIN Tennessee River
MINOR BASIN Tennessee River-Main Stem & Minor Trib.
STATION LOCATION Tennessee River at Chattanooga, Tennessee

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	21.900	33.700	24.800	47.900	116.000	153.000	28.900	40.000	28.000	29.100	29.500	28.000
2	28.100	36.400	34.000	44.800	98.300	137.000	34.700	35.600	28.700	29.100	32.900	16.100
3	37.900	42.200	23.500	43.800	80.600	132.000	27.500	37.100	27.900	30.500	30.900	23.300
4	38.900	35.400	27.100	48.400	79.200	127.000	17.500	29.000	28.300	30.600	32.600	28.200
5	40.800	10.400	35.700	50.300	79.100	123.000	24.500	32.000	28.700	35.800	22.600	27.000
6	41.100	33.300	38.000	59.900	66.400	106.000	26.500	30.000	28.700	38.900	30.500	29.400
7	29.000	40.400	36.300	65.600	51.700	98.700	26.500	36.800	29.100	32.400	31.500	28.400
8	22.000	35.400	37.000	60.100	55.000	86.100	5.000	40.100	28.600	20.700	32.500	27.400
9	26.400	38.700	31.900	58.400	56.500	87.400	30.000	39.200	29.600	30.100	37.400	16.000
10	37.800	37.700	27.700	51.400	59.100	93.700	27.000	40.900	29.600	35.600	31.700	28.200
11	39.900	28.100	49.900	51.200	54.600	92.100	32.500	40.200	29.300	35.100	29.500	27.800
12	29.200	24.200	108.000	54.200	51.700	98.800	73.500	33.200	28.600	37.400	15.100	27.300
13	32.300	26.200	144.000	50.500	50.200	87.400	86.500	20.800	29.700	40.800	32.300	28.400
14	30.900	31.300	109.000	40.900	42.500	84.700	60.500	27.400	29.600	34.600	29.000	26.800
15	29.900	32.100	58.000	41.400	43.100	79.000	43.500	35.000	29.100	24.000	27.100	23.500
16	39.900	31.200	41.100	43.000	43.800	72.100	55.000	34.000	29.700	38.200	37.600	16.500
17	31.700	28.700	92.800	38.900	42.700	68.100	62.500	39.000	29.300	35.100	36.900	25.800
18	35.200	28.600	143.000	35.100	41.600	67.300	48.500	37.900	28.800	33.200	24.700	25.900
19	35.100	31.000	176.000	40.300	43.300	56.900	42.000	31.800	30.200	33.000	13.700	23.800
20	40.600	31.500	168.000	42.200	38.300	46.700	42.000	18.400	30.100	23.300	21.100	26.700
21	40.700	30.900	124.000	39.300	39.000	62.100	41.500	28.000	28.700	32.000	24.000	28.600
22	32.300	31.800	105.000	43.300	58.400	81.900	41.500	27.400	28.800	26.900	29.900	29.000
23	34.600	30.600	88.300	53.600	105.000	82.200	39.500	26.800	27.500	35.300	37.400	14.000
24	34.100	29.700	83.500	78.300	171.000	68.300	38.500	27.900	28.000	32.800	31.500	28.100
25	35.500	29.000	83.600	100.000	172.000	58.200	38.500	28.700	28.600	28.700	20.800	22.000
26	36.000	20.900	81.200	108.000	166.000	41.000	40.000	28.400	28.000	33.200	15.100	23.300
27	41.800	32.300	75.700	138.000	169.000	41.300	38.000	26.100	28.700	35.600	26.300	24.800
28	43.600	35.100	76.500	149.000	168.000	41.600	39.000	28.500	28.800	30.000	27.600	27.500
29	15.800	32.500	76.300	164.000		39.200	33.500	28.400	29.500	19.700	26.300	26.600
30	38.600	27.600	73.300	160.000		36.000	39.500	28.400	30.700	29.100	26.700	18.100
31	32.600		68.900	141.000		30.900		29.000		32.100	28.600	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE TENNESSEE

MAJOR BASIN TENNESSEE RIVER

MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.

STATION LOCATION TENNESSEE RIVER AT

LENOIR CITY, TENNESSEE 107

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
1	30	62	2	9	2	1	1	1	3	1	65	6	26	5	91	7						
2	5	62	2	13	1	1	0	1	1	1	31	5	22	5	53	7						
2	12	62	2	20	0	1	0	1	0	1	31	5	21	5	52	7						
2	19	62	2	28	0	1	0	1	0	1	21	4	22	5	43	6						
2	26	62	3	9	2	2	0	0	2	2	84	8	36	5	120	9						
3	5	62	3	16	1	1	0	1	1	1	40	8	18	6	58	10						
3	12	62	3	22	1	1	0	1	1	1	28	5	22	5	50	7						
3	19	62	3	29	0	1	1	1	2	1	14	5	17	5	31	7						
3	26	62	4	5	0	1	0	1	0	1	12	4	25	5	37	6						
4	2	62	4	12	0	1	0	1	0	1	14	5	23	5	37	7						
4	9	62	4	24	0	1	0	1	0	1	12	4	12	4	24	6						
4	16	62	4	30	0	0	0	1	0	1	13	4	17	5	30	6						
4	30	62	5	31	0	1	0	1	0	1	4	5	7	6	11	7						
5	7	62	6	8	0	1	0	0	0	1	1	7	6	7	7	10						
5	14	62	6	21	0	0	0	0	0	0	1	5	13	6	14	8						
5	21	62	6	26	0	0	0	1	0	1	0	9	16	9	16	13						
5	28	62	6	28	0	0	0	0	0	0	4	6	10	7	14	9						
6	4	62	7	2	0	0	0	1	0	1	7	5	9	6	16	8						
6	18	62	7	12	0	0	0	0	0	0	3	5	11	7	14	9						
6	19	62	7	9	0	1	1	1	1	1	3	5	14	7	17	9						
6	25	62	9	9	0	0	0	1	0	1	1	4	10	6	11	7						
7	24	62	9	21	0	0	0	0	0	0	0	5	6	7	6	8						
7	30	62	8	21	0	0	0	1	0	1	3	5	11	6	14	7						
8	6	62	8	23	0	0	0	1	0	1	3	5	12	7	15	8						
8	14	62	8	30	0	1	0	1	0	1	5	5	12	7	17	8						
8	20	62	8	31	0	0	0	1	0	1	0	5	3	7	3	9						
8	27	62	9	30	0	0	0	1	0	1	11	5	7	8	18	9						
9	4	62	9	18	0	0	0	1	0	1	3	5	14	7	17	9						
9	10	62	9	25	0	0	0	0	0	0	38	7	6	8	44	11						
9	17	62	10	10	0	0	0	0	0	0	2	5	10	6	12	7						
9	24	62	10	17	0	0	0	1	0	1	6	6	12	6	18	8						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
LENOIR CITY, TENNESSEE 107

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
1	30	62	700	0	0	20	0	40	0	370	250	40	270																				
2	19	62	600	0	0	0	0	120	40	270	150	80	0																				
3	5	62	700	0	0	0	0	80	0	190	390	100	210																				
3	19	62	600	0	0	20	0	70	20	480	50	110	230	69	1	71	1																
4	2	62	800	0	0	0	0	20	40	480	250	80	40	69	2																		
4	16	62	1100	0	0	160	0	90	470	770	250	500	250	68	2	69	2	60	2														
5	7	62	800	0	0	40	20	100	0	540	60	190	40	69	2																		
5	21	62	700	0	0	60	0	0	20	230	360	680	270																				
6	4	62	1100	0	0	0	0	0	0	630	420	1310	720	68	2																		
6	18	62	1800	0	0	100	0	100	40	170	1350	40	150	92	3																		
7	2	62	1000	0	0	40	0	0	40	250	680	250	380	92	1	68	1																
7	16	62	1800	40	340	130	0	40	40	630	590	720	380	17	2	69	1	68	1	92	1												
8	6	62	1700	0	40	230	0	0	20	840	590	930	550	68	3	73	1	40	1	69	1	92	1										
8	20	62	1000	0	0	130	0	0	0	510	380	130	340	68	1																		
9	4	62	1200	0	250	40	0	20	0	510	420	380	40	68	2	92	1																
9	17	62	100	0	0	20	0	70	0	20	20	10	90																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
LENOIR CITY, TENNESSEE 107

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml	PROTOZOA (Identifiable) Number per ml	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD		4TH		5TH		NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes) 1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
1	30	62	61	12	36	8	15	8	65	7	65	0	0	4											0							0	0
2	19	62	57	28	82	9	58	9	70	6	48	0	0	2											0							0	0
3	5	62	61	26	62	9	65	8	36	8	49	80	0	3											0							0	0
3	19	62	61	40	57	11	82	8	9	4	37	0	0	3											0							0	0
4	2	62	61	37	57	10	82	7	27	6	40	0	0	1											0							0	0
4	16	62	61	74	56	10	31	1	33	1	14	20	0	15	11	1	17	1							0							0	0
5	7	62	56	38	57	24	58	13	61	7	10	40	0	14	11	1									8	51	1	50	1			0	2
5	21	62	27	41	58	13	56	13	57	5	28	110	0	10	17	1									6	51	1					0	0
6	4	62	58	16	27	15	56	15	2	7	47	110	0	3											13	51	2	76	1			0	0
6	18	62	92	40	91	14	94	8	27	5	33	0	0	7	11	1									8	76	1	50	1			0	0
7	2	62	47	9	92	9	56	8	58	6	68	0	0	23	22	2	17	1							2							0	0
7	16	62	57	18	28	13	92	12	82	9	48	40	0	7	22	1									6	50	1					0	0
8	6	62	27	53	2	11	91	7	57	6	23	0	0	87	11	3	17	3	22	1					1							0	0
8	20	62	57	17	30	16	2	13	82	10	46	0	0	204	17	4	11	4	22	4	16	3	2	1	12	53	2					0	0
9	4	62	91	34	27	13	57	12	82	6	35	0	0	182	11	4	17	4	22	2	16	2	18	1	6	77	2					0	0
9	17	62	57	21	95	21	56	7	92	5	46	0	0	306	11	5	17	5	16	3	22	3	18	3	6	50	1	53	1			0	0
																									13	50	2	53	1			0	4

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
LENOIR CITY, TENNESSEE 107

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
1	30	62	2	21	5010	91	27	64	2	5	10	2	1	7	0	3	2	1	4
3	1	62	4	15	4746	107	40	67	2	9	17	2	1	14	0	5	3	0	4
4	15	62	5	9	4804	58	24	34	1	6	9	3	1	5	0	3	2	0	3
5	9	62	6	3	5360	*	36	*	1	8	11	2	1	8	0	4	3	0	9
6	3	62	7	1	5410	82	39	43	1	11	12	3	1	7	1	4	4	0	7
7	1	62	7	28	5900	79	36	43	1	9	10	1	1	8	0	4	3	0	9
8	1	62	8	22	4910	110	36	74	0	8	13	2	1	10	0	5	3	1	6
9	1	62	9	30	4460	151	57	94	2	15	17	1	1	14	1	7	6	1	9

* NOT REPORTED - OVERHEATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STEM + MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
LENOIR CITY, TENNESSEE 107

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
1	30	62	-	-	-	-	-	-	-	-	17	-	96	10	-	22	-	-	-
2	5	62	-	-	-	-	-	-	-	-	26	-	-	-	-	86	-	-	-
2	19	62	-	-	-	-	-	-	-	-	19	-	-	10	-	25	-	-	-
3	12	62	12.0	-	7.4	-	-	2.3	-	-	-	62	104	-	95	-	-	-	-
3	19	62	14.0	-	7.3	-	-	2.8	-	-	-	69	98	-	60	-	-	-	-
4	2	62	-	-	-	-	-	-	-	-	14	-	-	10	-	17	-	113	-
4	9	62	-	-	-	-	-	-	-	-	4	-	-	-	-	6	-	59	-
4	16	62	-	-	-	-	15	-	-	-	8	-	92	-	-	21	-	-	-
4	30	62	-	-	-	-	-	-	-	-	-	-	-	10	-	28	-	-	-
5	8	62	18.0	-	7.2	-	-	2.8	6.7	-	-	68	98	-	75	-	-	-	-
5	14	62	-	-	-	-	-	-	-	-	15	70	-	10	-	-	-	-	-
5	20	62	20.0	-	7.0	-	-	3.4	-	-	-	62	102	-	75	-	-	-	-
5	28	62	-	-	-	-	-	-	-	-	32	-	100	5	-	25	-	-	-
6	4	62	-	-	-	-	12	-	-	-	19	78	-	-	-	-	-	-	-
6	11	62	-	-	-	-	-	-	-	-	58	164	304	10	490	270	.0	585	-
6	25	62	-	-	-	-	-	-	-	-	19	-	-	5	-	21	-	120	-
7	4	62	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-
7	24	62	-	-	-	-	-	-	-	-	21	-	-	5	-	20	-	-	-
8	6	62	28.0	-	7.2	-	-	2.7	6.5	-	21	66	110	5	75	15	-	-	-
8	14	62	-	-	-	-	-	-	-	-	38	-	-	5	-	30	.0	-	-
8	27	62	-	-	-	-	-	-	-	-	25	-	-	-	-	21	.0	-	-
9	17	62	26.0	-	7.0	-	-	-	-	-	-	64	102	-	80	-	-	-	-
9	24	62	-	-	-	-	-	-	-	-	16	-	-	0	-	10	.0	125	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Lenoir City, Tennessee
Data Furnished by Tennessee Valley Authority
through U.S. Geological Survey

STATE	Tennessee
MAJOR BASIN	Tennessee River
MINOR BASIN	Tennessee River-Main Stem & Minor Trib.
STATION LOCATION	Tennessee River at Lenoir City, Tennessee

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	18.800	16.800	33.900	35.300	37.900	45.200	18.900	20.600	15.800	20.600	17.300	14.100
2	22.000	18.500	33.400	34.200	36.900	41.800	18.800	20.700	15.500	20.300	17.800	13.600
3	22.700	16.800	32.300	34.000	36.200	40.400	16.900	20.500	14.300	18.900	19.100	14.300
4	20.200	16.700	34.000	34.000	36.100	40.200	16.500	20.200	15.500	19.400	19.200	17.200
5	19.700	17.200	35.900	34.100	36.200	40.000	18.600	21.600	16.200	19.000	17.000	16.000
6	19.400	18.900	36.200	32.600	37.000	38.800	20.100	19.100	17.200	19.700	18.000	13.800
7	20.000	20.000	35.500	33.500	36.900	37.800	15.800	20.200	16.600	18.600	21.400	14.000
8	19.000	19.500	36.900	33.000	36.400	38.000	16.000	21.400	15.800	18.400	20.500	13.500
9	20.900	19.800	37.700	34.300	36.300	39.400	17.100	20.900	16.000	22.500	19.000	13.400
10	20.700	19.900	35.600	33.200	35.400	39.400	17.600	20.000	14.100	19.800	18.300	16.000
11	20.500	17.500	37.900	32.600	35.900	39.600	28.400	20.300	15.400	19.500	18.200	15.100
12	20.200	16.600	53.800	32.300	35.900	40.000	30.600	21.200	17.100	18.900	17.200	14.500
13	20.200	17.000	42.100	32.100	34.900	40.400	25.800	21.200	17.500	19.800	18.200	14.700
14	20.100	18.500	34.900	32.000	33.200	39.600	21.200	20.500	17.300	20.500	18.000	15.300
15	21.000	16.300	32.700	33.900	33.900	39.200	18.700	21.600	16.400	19.100	19.900	16.200
16	19.500	18.500	33.600	35.900	33.700	38.000	19.000	20.200	16.400	19.300	18.600	15.000
17	20.300	19.000	38.600	35.000	34.200	37.800	19.000	21.700	15.800	20.500	16.900	14.600
18	20.400	20.200	56.600	34.000	33.000	37.100	18.300	19.700	16.400	19.300	16.300	17.100
19	21.100	18.600	51.200	32.300	34.800	36.000	18.700	17.300	17.600	18.400	17.900	16.700
20	22.000	18.500	40.900	33.000	36.000	34.800	18.300	17.000	17.500	19.600	19.600	14.900
21	18.500	20.600	39.100	31.800	36.400	36.600	18.000	18.400	16.700	19.300	17.800	15.600
22	18.700	18.200	42.100	33.000	40.200	37.100	18.200	19.400	17.000	18.800	17.900	14.700
23	20.100	18.400	42.300	37.400	53.200	35.400	17.800	19.600	16.800	20.900	17.200	15.300
24	21.100	18.200	41.200	37.300	56.600	35.000	19.500	19.300	15.900	20.600	17.500	15.400
25	19.700	18.400	41.200	39.600	46.000	34.600	19.600	19.200	16.800	20.600	16.100	16.300
26	20.300	16.900	41.700	38.900	48.000	37.100	20.100	18.200	17.700	21.300	16.200	16.800
27	20.600	17.100	41.300	43.200	44.600	34.200	19.200	17.100	17.400	19.500	16.500	17.000
28	18.800	17.600	41.500	46.800	44.800	33.400	20.000	19.400	18.000	19.600	17.500	15.100
29	19.400	17.700	42.600	44.800		33.300	20.100	18.600	17.400	20.000	18.000	15.700
30	18.100	17.800	38.600	38.500		31.500	19.600	19.500	16.400	20.700	17.300	16.200
31	17.800		39.600	35.900		34.400		19.800		20.900	17.800	

Computed as sum of Little Tennessee River at McGhee, Tennessee plus the sum of Tennessee River at Fort Loudon Dam

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MISSISSIPPI
MAJOR BASIN SOUTHEAST
MINOR BASIN UPPER TOMBIGBEE RIVER
STATION LOCATION TOMBIGBEE RIVER BELOW
COLUMBUS, MISSISSIPPI 95

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			•CHLOROFORM EXTRACTABLES											
BEGINNING			END								NEUTRALS									
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	16	61	10	30	4400	251	96	155	4	26	19	2	2	14	1	9	12	1	25
1	8	62	1	12	2009	215	87	128	3	26	30	2	1	27	0	10	3	2	13
2	12	62	2	19	1723	280	66	214	1	12	25	3	2	19	1	10	5	1	12
3	12	62	3	19	852	*	-	-	-	-	-	-	-	-	-	-	-	-	-
5	14	62	5	21	5000#	102	53	49	3	15	11	1	1	8	1	10	5	0	9
6	11	62	6	18	4960	120	55	65	3	15	12	2	1	9	0	5	5	1	14
7	16	62	7	23	4590	101	46	55	0	12	13	2	1	9	1	5	3	1	12
8	20	62	8	27	995	134	41	93	0	10	19	3	2	14	0	4	1	1	6
9	18	62	9	25	855	315	60	255	1	20	25	6	4	13	2	8	2	2	2

ESTIMATED

* LOW FLOW - NOT PROCESSED

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MISSISSIPPI
MAJOR BASIN SOUTHEAST
MINOR BASIN UPPER TOMBIGBEE RIVER
STATION LOCATION TOMBIGBEE RIVER BELOW
COLUMBUS, MISSISSIPPI

95

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	1	61	10	14	0	1	0	1	0	1	2	4	8	5	10	6						
10	9	61	10	30	0	1	0	1	0	1	8	5	19	5	27	7						
10	16	61	10	26	0	1	0	1	0	1	6	4	4	4	10	6						
10	23	61	11	1	0	1	0	1	0	1	3	4	6	4	9	6						
10	30	61	11	7	0	1	0	1	0	1	4	4	6	4	10	6						
11	6	61	11	16	0	1	0	1	0	1	26	4	17	6	38	7						
11	13	61	11	27	1	1	0	1	1	1	40	5	26	5	66	7						
11	20	61	11	30	1	1	0	0	1	1	25	5	23	4	48	6						
12	4	61	12	12	3	2	0	1	3	2	155	11	36	6	191	13						
12	11	61	12	19	2	2	0	1	2	2	176	10	49	5	225	11						
12	28	61	1	11	0	1	0	1	0	1	27	5	30	5	57	7						
1	4	62	1	15	2	1	0	1	2	1	88	8	24	5	112	9						
1	8	62	1	22	1	1	0	1	1	1	108	7	67	5	175	9						
1	15	62	1	26	2	2	0	1	2	2	138	8	36	5	174	9						
1	22	62	2	2	2	1	0	0	2	1	87	8	26	6	113	10						
1	29	62	2	8	1	1	1	1	2	1	84	7	70	6	154	9						
2	5	62	2	13	0	1	0	0	0	1	85	6	46	5	131	8						
2	12	62	2	21	1	1	0	0	1	1	29	5	15	5	44	7						
2	19	62	3	7	1	1	0	1	1	1	122	7	36	5	158	9						
2	26	62	3	8	2	2	0	1	2	2	130	8	49	5	179	9						
3	5	62	3	15	1	1	0	1	1	1	94	9	41	6	135	11						
3	12	62	3	27	3	2	0	1	3	2	195	9	50	5	245	10						
3	19	62	3	29	0	1	0	1	0	1	27	5	19	5	46	7						
3	26	62	4	12	1	1	1	1	2	1	218	10	42	5	260	11						
4	2	62	4	12	2	2	0	1	2	2	378	18	94	6	472	19						
4	9	62	4	26	1	1	0	0	1	1	73	6	46	5	119	7						
4	16	62	5	1	3	2	0	1	3	2	163	14	60	5	223	15						
4	23	62	5	31	1	1	0	1	1	1	84	7	86	7	170	10						
4	30	62	5	25	0	1	0	1	0	1	52	7	27	6	79	9						
5	7	62	6	12	0	0	0	1	0	1	7	5	36	6	43	7						
5	14	62	6	21	0	0	0	0	0	0	6	6	17	7	23	9						
5	21	62	6	25	0	1	0	0	0	1	7	7	13	7	20	10						
5	28	62	6	29	1	1	1	1	2	1	5	7	9	7	14	10						
6	5	62	7	6	2	2	0	1	2	2	78	9	35	4	113	11						
6	11	62	7	9	0	1	0	1	0	1	21	6	17	7	38	9						
6	18	62	7	16	1	1	0	0	1	1	21	12	1	5	22	13						
6	25	62	7	31	1	1	0	0	1	1	25	8	9	6	34	10						
7	9	62	8	3	4	2	1	1	5	2	40	8	23	5	63	9						
7	16	62	8	7	0	1	0	0	0	1	16	6	13	6	29	8						
7	23	62	8	15	0	1	0	1	0	1	0	6	8	6	8	8						
7	30	62	8	21	0	0	0	0	0	0	11	6	7	5	18	7						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MISSISSIPPI
MAJOR BASIN SOUTHEAST
MINOR BASIN UPPER TOMBIGBEE RIVER
STATION LOCATION TOMBIGBEE RIVER BELOW
COLUMBUS, MISSISSIPPI 95

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
8	6	62	10	8	0	1	0	0	0	1	14	6	7	5	21	7						
8	13	62	8	29	0	1	0	1	0	1	7	6	10	6	17	8						
8	20	62	9	4	1	1	0	0	1	1	4	7	12	7	16	10						
8	27	62	9	19	0	1	0	1	0	1	5	6	7	9	12	11						
9	4	62	9	30	–	–	–	–	–	–	9	5	5	5	14	7						
9	11	62	12	11	0	1	0	0	0	1	1	13	4	8	5	15						
9	18	62	10	22	0	1	0	0	0	1	5	3	10	3	15	4						
9	25	62	10	24	1	0	0	1	1	1	13	5	6	6	19	8						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MISSISSIPPI
MAJOR BASIN SOUTHEAST
MINOR BASIN UPPER TOMBIGBEE RIVER
STATION LOCATION TOMBIGBEE RIVER BELOW
COLUMBUS, MISSISSIPPI 95

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	16	61	400	0	0	60	0	80	0	210	80	40	100																				
11	13	61	200	0	20	20	0	20	0	70	70	70	90																				
11	27	61	400	0	0	20	0	250	0	70	70	20	90	51	1																		
12	11	61	200	0	0	20	0	0	0	40	190	20	40																				
12	28	61	00	0	0	0	0	20	0	20	0	0	0																				
1	8	62	500	270	0	0	0	70	0	70	70	50	50																				
1	22	62	00	0	0	0	0	0	0	0	20	0	20																				
2	12	62	100	0	0	0	0	0	20	20	20	0	0																				
2	26	62	300	0	0	40	0	20	60	20	190	0	0																				
3	12	62	400	0	0	0	0	0	0	120	270	40	20																				
3	26	62	1000	0	0	210	0	80	80	60	540	0	170	92	1																		
4	9	62	800	0	20	60	20	60	250	60	330	20	210																				
4	23	62	800	0	0	60	0	210	270	80	170	0	40	51	1	60	1																
5	14	62	3500	120	0	970	0	870	210	790	500	60	80	51	3	25	2	38	2	71	2	60	1	68	1								
5	28	62	14900	250	460	2830	290	1140	0	8480	1480	3140	890	68	6	71	3	57	3	24	2	38	2	40	2	17	2	29	1	30	1	51	1
6	11	62	800	60	20	80	0	100	100	150	290	20	80																				
6	25	62	2200	20	20	330	0	1040	60	230	460	20	20	57	3	24	1	88	1														
7	9	62	600	0	0	20	80	40	0	170	330	20	40	68	1																		
7	23	62	9600	540	120	1910	0	660	40	4890	1410	1780	80	68	5	71	4	38	3	88	3	3	2	51	2	52	1	69	1	86	1	25	1
8	13	62	2900	170	60	430	0	1010	210	580	460	80	40	68	2	51	2	56	1	38	1	63	1										
8	27	62	12500	170	0	0	0	130	0	10510	1650	4140	510	68	7	86	3	69	3	88	2	38	1	24	1	4	1						
9	11	61	3600	90	20	360	0	140	0	2810	230	1730	320	68	5																		
9	25	62	800	0	0	50	0	270	250	200	50	270	0	62	1	56	1	68	1														

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MISSISSIPPI

MAJOR BASIN SOUTHEAST

MINOR BASIN UPPER TOMBIGBEE RIVER

STATION LOCATION TOMBIGBEE RIVER BELOW

COLUMBUS, MISSISSIPPI 095

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	16	61	26	33	92	6	70	6	65	5	50	0	0	0											0							0	0
11	13	61	26	14	62	14	10	9	52	8	55	0	0	6											0							1	0
11	27	61	62	26	92	11	26	5	31	3	55	180	0	0											0							0	0
12	11	61										0	0	2											0							1	0
12	28	61										0	0	1											0							1	0
1	8	62										110	0	0											0							0	0
1	22	62										70	0	0											0							1	0
2	12	62										100	0	0											0							1	0
2	26	62										60	0	1											0							0	0
3	1	62	92	20	74	11	82	6	65	4	59	0	0	0											0							1	0
3	26	62	92	49	65	8	33	4	43	3	36	0	0	0											0							0	0
4	9	62	92	15	43	10	57	8	86	7	60	0	0	0											0							0	0
4	23	62	57	14	26	11	92	7	54	4	64	0	0	42	11	3	21	2							16	76	1	52	1	53	1	0	0
5	14	62	27	16	26	10	57	8	65	8	58	0	0	2											0							1	0
5	28	62	26	25	27	21	82	11	71	5	38	380	0	10	22	1									0							0	0
6	11	62	92	25	53	11	71	8	43	7	49	0	0	0											1							0	0
6	25	62	26	35	82	15	71	9	65	4	37	0	0	0											0							0	0
7	9	62	26	26	92	12	64	8	55	3	51	0	0	1											0							0	0
7	23	62	26	51	82	26	71	9	70	5	9	0	0	382	22	7	2	4							0							0	0
8	13	62	26	47	75	9	71	7	82	6	31	0	0	2											0							0	0
8	27	62	26	87	53	9	71	2	56	1	1	0	0	330	22	6	7	1	2	1	15	1			0							0	0
9	11	61	26	80	82	4	70	2	53	1	13	0	0	1											0							0	0
9	25	62	26	23	91	9	57	8	94	8	52	0	0	6											0							0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MISSISSIPPI
MAJOR BASIN SOUTHEAST
MINOR BASIN UPPER TOMBIGREE RIVER
STATION LOCATION TOMBIGBEE RIVER BELOW
COLUMBUS, MISSISSIPPI 95

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
11	20	61	-	-	-	-	-	-	-	-	13	-	112	35	155	15	.3	-	-
11	27	61	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-
12	11	61	-	-	-	-	-	-	-	-	6	50	58	10	-	14	-	-	-
12	28	61	-	-	7.7	-	-	-	-	-	6	-	44	10	-	14	-	-	-
1	15	62	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-
2	12	62	-	-	-	-	-	-	-	-	5	-	-	-	-	10	-	-	-
2	19	62	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-
2	26	62	-	-	-	-	-	-	-	-	-	-	-	20	-	-	-	-	-
3	12	62	-	-	7.4	-	-	-	-	-	5	38	56	20	1180	12	-	-	-
3	26	62	-	-	-	-	-	-	-	-	6	-	64	10	-	44	-	-	-
4	2	62	-	-	-	-	-	-	-	-	7	32	40	10	*25	7	.0	54	-
4	16	62	-	-	-	-	-	-	-	-	8	-	-	15	-	1	-	-	-
4	20	62	-	-	-	-	-	-	-	-	4	32	32	15	-	6	-	-	-
4	30	62	-	-	-	-	-	-	-	-	4	-	44	10	-	13	-	-	-
5	14	62	-	-	-	-	-	-	-	-	7	-	-	5	-	-	-	-	-
5	21	62	-	-	-	-	10	-	-	-	-	-	40	-	-	8	.0	-	-
5	28	62	-	-	-	-	-	-	-	-	7	-	-	-	-	12	-	-	-
7	23	62	-	-	-	-	-	-	-	-	7	40	52	5	25	25	.0	-	-
7	30	62	-	-	7.9	-	-	-	-	-	6	36	40	0	*25	7	-	-	-
8	6	62	-	-	7.9	-	-	-	-	-	5	26	48	5	*25	8	-	-	-
8	27	62	-	-	-	-	13	-	-	-	12	28	48	5	25	17	.0	-	-
9	4	62	-	-	-	-	-	-	-	-	8	12	56	0	25	38	-	-	-
9	24	62	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Columbus, Mississippi
Operated by U.S. Geological Survey

STATE Mississippi
MAJOR BASIN Southeast
MINOR BASIN Upper Tombigbee River
STATION LOCATION Tombigbee River below Columbus, Mississippi

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	1.660	4.180	2.950	10.600	2.870	34.400	56.600	5.260	1.860	1.430	1.070	1.300
2	1.440	3.980	2.710	13.200	2.850	28.500	62.100	5.620	1.750	1.360	1.040	1.350
3	1.270	3.440	2.510	13.300	3.210	23.400	56.700	5.790	1.620	1.340	.975	1.460
4	1.110	3.170	2.330	13.600	4.380	19.000	51.900	4.920	1.500	1.370	.881	1.710
5	1.010	2.760	2.210	13.200	4.260	14.800	44.300	4.090	1.440	1.300	.875	2.010
6	1.190	2.470	2.130	11.000	3.880	11.700	35.400	3.680	1.440	1.210	.844	1.790
7	1.760	2.240	2.080	9.650	3.580	11.700	28.800	4.100	2.330	2.240	.838	1.670
8	2.490	1.920	2.040	7.960	5.920	22.100	22.600	5.860	2.650	3.180	.859	1.840
9	3.540	1.700	2.040	5.890	9.000	28.200	20.800	6.420	2.950	3.410	1.970	1.690
10	4.190	1.960	2.020	4.670	8.200	24.400	19.000	8.080	2.690	2.560	1.860	1.530
11	3.220	4.650	2.060	4.000	6.430	21.900	16.000	6.300	3.030	1.830	1.370	1.360
12	2.630	4.280	3.000	3.480	5.400	20.800	17.000	5.530	2.760	4.750	1.050	1.210
13	2.300	3.770	3.740	3.140	4.870	21.500	20.600	4.880	2.630	7.850	.879	1.120
14	1.990	3.290	3.180	2.990	4.630	26.100	19.400	4.080	2.450	8.140	.779	1.060
15	1.670	2.840	2.870	3.140	4.450	25.300	19.700	3.730	2.250	7.210	.696	1.070
16	1.390	2.530	2.640	3.690	4.120	24.100	18.700	6.970	2.010	8.140	2.340	1.220
17	1.370	2.470	2.610	3.800	3.840	21.400	15.400	8.430	1.920	6.400	6.910	1.090
18	1.450	2.940	2.440	3.490	5.130	22.300	12.400	6.500	1.880	4.940	9.330	.995
19	1.360	2.670	2.260	3.360	12.900	24.900	10.400	4.630	1.760	3.780	9.080	.929
20	1.220	2.540	2.220	5.510	24.300	22.000	8.390	3.500	2.280	2.660	5.520	.877
21	1.710	2.350	2.880	6.870	44.500	22.900	7.120	2.940	7.490	2.160	2.990	.840
22	2.050	2.210	4.850	5.580	62.800	23.100	6.320	2.640	7.880	1.980	2.140	.799
23	2.160	2.780	4.150	4.420	94.100	21.900	5.640	2.420	5.250	1.890	1.730	.787
24	1.770	5.470	3.630	3.860	101.000	20.800	5.040	2.630	3.630	1.750	1.490	.767
25	1.570	5.120	3.140	3.520	82.800	18.300	4.550	2.640	2.840	2.370	2.480	.742
26	1.440	4.330	2.900	3.670	65.100	16.300	4.380	2.510	2.630	2.770	2.730	.724
27	1.300	3.760	2.780	4.350	52.600	14.300	6.560	2.450	2.230	2.500	2.940	.696
28	1.170	3.150	2.620	4.230	43.500	18.100	9.780	2.640	1.960	1.990	2.290	.681
29	1.090	2.820	2.510	3.660		27.800	8.560	2.630	1.770	1.800	1.800	.662
30	1.060	2.850	3.720	3.260		29.100	6.710	2.290	1.650	1.490	1.570	.659
31	1.660		8.030	3.000		39.300		2.040		1.330	1.400	

Computed as sum of Tombigbee River at Columbus, Mississippi plus 3 times the sum of Luxapalila Creek at Steens, Mississippi.

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE CALIFORNIA-NEVADA

MAJOR BASIN GREAT BASIN

MINOR BASIN NORTHWESTERN LAHONTAN

STATION LOCATION TRUCKEE RIVER, CAL-NEV BORDER AT

FARAD, CALIFORNIA 88

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA								DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL						ALPHA		BETA	
MO.	DAY	YR.	MO	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±			MO	DAY	µµc/g	±	µµc/g	±
10	6	61	10	16	0	1	0	1	0	1	3	4	5	5	8	6								
10	16	61	11	20	-	-	-	-	-	-	4	5	1	6	5	8								
10	23	61	11	2	0	0	0	1	0	1	20	4	30	5	50	6								
10	30	61	11	10	0	1	0	1	0	1	5	4	16	5	21	6								
11	6	61	11	22	0	0	1	0	1	0	0	5	42	6	42	8								
11	13	61	11	28	0	1	0	1	0	1	6	5	1	6	7	8								
11	20	61	12	1	0	1	1	1	1	1	83	6	26	5	109	8								
11	27	61	12	6	0	1	0	1	0	1	15	6	18	6	33	8								
12	4	61	12	14	1	1	1	1	2	1	11	4	21	5	32	6								
12	11	61	12	21	0	1	0	1	0	1	2	4	8	5	10	6								
12	18	61	1	4	0	1	0	1	0	1	3	4	16	5	19	6								
12	26	61	1	11	0	0	0	1	0	1	1	4	5	4	6	6								
1	2	62	1	15	0	0	1	1	1	1	0	5	5	6	5	8								
1	8	62	1	18	0	1	0	1	0	1	15	4	14	4	29	6								
1	15	62	1	26	0	1	1	1	1	1	8	4	12	5	20	7								
1	26	62	2	7	0	1	0	1	0	1	6	4	9	4	15	6								
1	29	62	2	12	1	1	0	1	1	1	18	5	9	5	27	7								
2	5	62	2	15	0	1	0	0	0	1	25	6	12	4	37	7								
2	14	62	3	1	0	1	0	1	0	1	105	6	86	6	191	8								
2	19	62	3	6	1	1	1	1	2	1	28	5	43	5	71	7								
2	26	62	3	12	0	1	0	1	0	1	21	5	26	5	47	7								
3	5	62	3	20	0	1	0	1	0	1	21	4	19	5	40	6								
3	12	62	3	26	0	1	0	1	0	1	29	5	49	6	78	7								
3	19	62	4	3	0	1	0	1	0	1	13	4	15	5	28	6								
4	2	62	4	19	1	1	0	0	1	1	44	6	18	4	62	7								
4	9	62	4	23	1	2	1	1	2	2	109	13	23	4	132	14								
4	18	62	5	1	0	1	0	1	0	1	12	5	12	5	24	7								
5	22	62	6	30	-	-	-	-	-	-	134	17	7	3	141	17								
5	28	62	6	28	0	1	0	0	0	1	5	6	7	5	12	8								
6	4	62	7	10	1	1	0	1	1	1	5	5	21	6	26	8								
6	11	62	7	16	0	1	0	0	0	1	5	6	5	6	10	8								
6	18	62	7	20	0	0	0	0	0	0	8	5	9	5	17	7								
6	25	62	7	31	0	1	0	0	0	1	1	7	3	6	4	9								
7	2	62	8	6	0	0	1	1	1	1	3	5	15	6	18	7								
7	9	62	10	17	0	0	0	1	0	1	4	5	2	5	6	7								
7	23	62	8	15	0	0	0	0	0	0	0	8	2	6	2	10								
7	30	62	9	12	0	0	0	0	0	0	5	6	5	6	10	8								
8	6	62	9	30	0	0	0	1	0	1	7	6	4	6	11	8								
8	13	62	8	23	0	0	0	1	0	1	1	5	3	5	4	7								
8	20	62	9	19	0	0	1	1	1	1	5	5	24	6	29	7								
8	27	62	9	21	0	0	1	1	1	1	1	7	4	8	5	11								

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE CALIFORNIA-NEVADA

MAJOR BASIN GREAT BASIN

MINOR BASIN NORTHWESTERN LAHONTAN

STATION LOCATION TRUCKEE RIVER, CAL-NEV BORDER AT
FARAD, CALIFORNIA 98

DATE SAMPLE TAKEN			DATE OF DETERMINATION		RADIOACTIVITY IN WATER												RADIOACTIVITY IN PLANKTON					
					ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO	DAY	µµc/g	±	µµc/g	±
9	5	62	10	4	–	–	–	–	–	–	6	6	9	7	15	9						
9	21	62	10	16	0	1	0	1	0	1	4	6	26	6	30	8						
9	28	62	10	24	1	2	0	1	1	2	43	17	5	6	48	18						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE CALIFORNIA-NEVADA
MAJOR BASIN GREAT BASIN
MINOR BASIN NORTHWESTERN LAHONTAN
STATION LOCATION TRUCKEE RIVER, CAL-NEV BORDER AT
FARAD, CALIFORNIA 88

DATE OF SAMPLE			ALGAE *(Number per milliliter)*									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)*																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	16	61	1100	0	80	80	0	20	0	330	600	120	190	81	1	71	1																
11	6	61	800	0	0	40	0	210	0	310	250	40	190	71	1																		
11	20	61	1000	0	0	20	0	20	110	230	590	90	410																				
12	4	61	300	0	0	0	0	20	0	60	210	20	190																				
12	18	61	500	0	0	0	0	0	0	60	460	80	210	82	1																		
1	2	62	400	0	0	0	0	0	0	20	370	20	60	82	1																		
1	15	62	700	0	0	0	0	150	0	0	520	0	120	82	1																		
2	5	62	10900	0	20	50	20	270	70	810	9680	610	1400	69	2	88	2	92	1	82	1	51	1	77	1								
2	19	62	700	0	0	0	20	0	0	110	570	20	340																				
3	5	62	600	0	0	0	0	20	20	120	440	0	80																				
3	19	62	4000	0	20	20	20	190	40	210	3540	20	1200	88	4	92	3	82	2	85	2	81	1	51	1	68	1						
4	2	62	13000	0	40	0	20	190	40	1080	11680	120	2690	88	5	92	4	97	4	82	3	81	3	71	3	79	3	84	2	97	2	98	2
4	18	62	1100	0	0	20	0	40	0	230	810	0	60																				
5	22	62	37800	0	40	130	0	210	40	2950	34440	1100	9990	71	5	84	3	92	3	69	2	88	2	81	2	57	1						
6	4	62	1900	0	0	0	20	120	0	190	1530	60	150	92	2	81	2	88	1	77	1	97	1										
6	18	62	1300	0	0	20	0	0	0	80	1180	170	590	81	2																		
7	2	62	1100	60	0	0	40	0	150	40	830	20	330	81	2																		
7	16	62	700	0	0	0	0	0	0	40	660	40	370	81	1																		
8	6	62	700	0	0	0	0	0	0	40	620	80	330																				
8	20	62	1400	0	0	0	0	0	0	300	1060	250	1390	71	1	79	1	92	1														
9	5	62	2200	0	0	0	0	0	210	170	1770	130	1650	82	3	79	2	63	1	81	1	92	1										
9	14	62	100	0	0	10	0	0	0	10	30	0	680																				
9	28	62	500	0	30	0	0	100	0	90	310	370	1170																				

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE CALIFORNIA-NEVADA

MAJOR BASIN GREAT BASIN

MINOR BASIN NORTHWESTERN LAHONTAN

STATION LOCATION TRUCKEE RIVER, CAL-NEV BORDER AT
FARAD, CALIFORNIA 088

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
			1ST		2ND		3RD		4TH					ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
															GENERA AND COUNT LEVEL (See text for Codes)											GENERA AND COUNT LEVEL (See text for Codes)							
														NUMBER PER LITER	1ST		2ND		3RD		4TH		5TH		NUMBER PER LITER	1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	16	61	32	14	36	14	16	7	92	6	59	0	0	3											0							0	0
11	6	61	36	26	58	14	82	11	71	6	43	0	0	21	17	2									0							0	0
11	20	61	36	14	70	7	82	7	62	5	67	140	0	25	21	2	11	1	17	1					1							0	0
12	4	61	36	37	71	11	72	8	82	7	37	0	0	19	17	2	11	1							1							0	0
12	18	61	36	48	71	6	93	4	46	4	38	0	0	11	11	1									0							0	0
1	2	62	36	57	92	9	70	5	82	5	24	0	0	4											0							0	0
1	15	62	36	48	71	11	92	5	93	4	32	0	0	24	15	1	11	1							0							0	0
2	5	62	36	29	71	8	92	8	72	6	49	70	0	17	15	2									4							0	0
2	19	62	92	10	70	9	2	5	16	5	71	20	0	0											0							0	0
3	5	62	31	11	36	10	2	9	70	6	64	20	0	0											0							0	0
3	19	62	71	23	92	16	36	9	52	8	44	60	0	3											0							0	0
4	2	62	92	16	97	11	71	7	36	7	59	120	0	7	11	1									0							0	1
4	18	62	31	8	49	7	92	5	61	5	75	20	0	0											0							0	0
5	22	62	92	23	71	7	52	7	36	7	56	0	0	0											-							0	0
6	4	62	9	29	92	16	31	14	14	8	33	40	0	27	11	3									1							0	0
6	18	62	31	32	47	10	2	5	9	5	48	0	0	4											0							1	0
7	2	62	31	36	2	10	92	7	36	7	40	0	0	0											0							0	0
7	16	62	31	23	2	12	16	8	92	6	51	0	0	5											4	76	1					0	1
8	6	62	16	18	31	11	92	6	2	6	59	0	0	9	11	1									0							0	0
8	20	62	16	20	31	9	2	8	93	7	56	0	0	0											0							0	0
9	5	62	36	36	16	17	31	8	92	7	32	0	0	4											0							0	0
9	14	62	16	16	36	10	31	9	2	9	56	0	0	0											0							0	0
9	28	62	26	60	57	4	16	4	58	4	28	0	0	1630	11	8									0							0	1

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE CALIFORNIA-NEVADA

MAJOR BASIN GREAT BASIN

MINOR BASIN NORTHWESTERN LAHONTAN

STATION LOCATION TRUCKEE RIVER, CAL-NEV BORDER AT
FARAD, CALIFORNIA 88

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	3	61	11	1	6660	111	36	75	0	8	14	2	1	10	1	5	3	1	5
11	1	61	11	29	5560	97	28	69	0	7	10	1	1	8	0	3	2	0	6
12	4	61	1	2	5861	84	32	52	1	10	8	1	1	6	0	4	2	0	7
1	2	62	2	1	4990	79	17	62	0	4	7	1	1	5	0	2	1	1	2
2	1	62	2	14	5140	77	26	51	1	7	9	1	1	7	0	4	1	1	3
3	16	62	4	4	5140	89	31	58	1	8	10	2	1	7	0	4	2	1	5
5	22	62	6	4	3580	101	55	46	2	16	16	3	1	10	2	6	7	1	7
8	20	62	9	14	7150	106	39	67	1	10	9	1	1	7	0	4	4	1	10
9	20	62	10	29	13000#	63	16	47	0	3	6	0	1	5	0	2	1	0	4

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE CALIFORNIA-NEVADA
MAJOR BASIN GREAT BASIN
MINOR BASIN NORTHWESTERN LAHONTAN
STATION LOCATION TRUCKEE RIVER, CAL-NEV BORDER AT
FARAD, CALIFORNIA 88

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	4	61	11.1	9.2	8.0	-	-	-	-	-	2	57	48	-	9	-	-	-	-
11	8	61	3.3	11.4	8.0	-	-	-	-	-	3	56	51	-	4	5	-	-	-
11	13	61	3.1	10.8	7.8	1.5	-	-	-	-	5	28	56	5	-	7	.1	-	-
11	27	61	-	-	-	-	-	-	-	-	-	-	-	0	-	5	.1	60	-
12	5	61	.6	11.3	7.5	-	-	-	-	-	4	55	48	-	-	4	-	90	-
12	18	61	-	-	-	-	-	-	-	-	-	-	-	-	-	14	-	-	-
12	26	61	-	-	-	-	-	-	-	-	-	-	-	-	-	10	.1	-	-
1	4	62	.0	11.8	7.3	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-
1	10	62	1.1	11.8	7.6	-	-	-	-	.0	6	55	49	5	7	6	.0	88	120
1	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	10	.0	-	-
1	29	62	-	-	-	-	-	-	-	-	-	-	-	-	-	12	.0	-	-
2	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	9	.0	-	-
2	7	62	2.2	11.4	7.3	-	-	-	-	.0	5	52	47	-	-	6	.0	84	-
2	12	62	1.5	11.8	7.3	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-
3	14	62	.6	11.9	7.3	-	-	-	-	.0	3	49	45	5	11	4	.1	81	4
3	28	62	2.4	11.3	7.4	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-
4	4	62	2.7	11.6	7.2	-	-	-	-	.0	2	34	34	20	20	5	.1	68	-
4	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	5	.0	-	-
5	11	62	7.8	10.8	7.2	-	-	-	-	.0	1	31	23	10	8	1	.0	58	22
5	23	62	9.0	9.1	7.6	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-
6	6	62	9.5	8.9	7.8	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-
6	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	22	.0	-	-
6	15	62	10.1	9.3	7.5	-	-	-	-	.0	1	31	25	5	1	1	.5	42	340
7	13	62	14.4	8.4	7.7	-	-	-	-	.1	3	39	31	10	8	1	.0	59	-
7	18	62	10.0	8.2	7.8	.9	-	-	-	-	-	-	-	-	-	-	-	-	-
7	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	10	.0	-	-
8	6	62	-	-	-	-	-	-	-	-	9	42	40	-	-	5	-	-	-
8	10	62	13.3	9.0	7.7	-	-	-	-	.0	3	42	33	10	4	2	-	60	50
8	13	62	-	-	-	-	-	-	-	-	-	-	-	-	-	3	.0	86	-
8	20	62	-	-	-	-	-	-	-	-	3	44	44	-	-	4	-	-	-
9	5	62	-	-	-	-	-	-	-	-	4	84	40	5	25	3	.0	61	-
9	10	62	10.0	9.0	7.8	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-
9	14	62	14.0	8.9	7.0	-	-	-	-	.0	3	37	30	10	2	2	.0	64	-
9	21	62	-	-	-	-	-	-	-	-	4	40	52	10	*25	3	.0	57	-
9	28	62	-	-	-	-	-	-	-	-	2	40	80	5	*25	2	.0	50	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Farad, California
Operated by U.S. Geological Survey

STATE California-Nevada

MAJOR BASIN Great Basin

MINOR BASIN Northwestern Lahontan

STATION LOCATION Truckee Riv., Calif.-Nev. Border at Farad, California

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	.094	.092	.094	.114	.149	.155	.670	1.310	1.220	.488	.516	.502
2	.094	.088	.112	.099	.132	.124	.685	1.420	1.310	.493	.529	.498
3	.084	.086	.105	.110	.124	.142	.725	1.500	1.330	.547	.488	.498
4	.062	.086	.094	.090	.124	.139	.810	1.680	1.170	.520	.498	.506
5	.058	.084	.094	.092	.126	.157	.932	2.090	1.050	.498	.498	.506
6	.064	.084	.090	.101	.129	.214	.962	2.050	1.010	.498	.493	.520
7	.088	.086	.088	.099	.149	.255	.986	1.880	1.020	.502	.498	.511
8	.086	.086	.082	.101	.155	.258	1.110	2.040	.998	.516	.506	.493
9	.082	.086	.086	.099	.387	.264	1.260	2.180	1.050	.529	.511	.488
10	.080	.084	.107	.096	.462	.249	1.210	1.770	1.100	.511	.502	.475
11	.078	.082	.099	.072	.298	.249	1.110	1.460	1.050	.534	.488	.471
12	.078	.078	.122	.069	.246	.234	1.150	1.270	.992	.588	.484	.480
13	.076	.070	.132	.058	.258	.232	1.260	1.060	.950	.529	.480	.484
14	.076	.078	.110	.064	.298	.234	1.400	1.010	.865	.538	.506	.480
15	.074	.082	.094	.058	.316	.237	1.620	.938	.770	.524	.516	.484
16	.074	.076	.088	.078	.317	.240	1.510	.980	.770	.511	.511	.475
17	.072	.065	.088	.096	.212	.237	1.570	.938	.816	.511	.506	.480
18	.072	.067	.086	.103	.184	.240	1.680	.904	.870	.506	.498	.488
19	.072	.082	.090	.096	.181	.252	1.740	.962	.909	.493	.493	.480
20	.074	.090	.116	.076	.181	.258	1.500	.926	.876	.488	.502	.475
21	.192	.082	.209	.076	.168	.252	1.360	.870	.826	.556	.493	.475
22	.124	.084	.160	.070	.157	.258	1.420	.909	.780	.534	.493	.475
23	.096	.086	.142	.070	.160	.276	1.480	1.060	.730	.511	.506	.467
24	.088	.084	.132	.070	.157	.320	1.480	.992	.670	.502	.498	.471
25	.084	.088	.126	.080	.149	.348	1.360	.887	.630	.502	.493	.493
26	.082	.094	.119	.080	.136	.365	1.290	.838	.588	.502	.488	.502
27	.094	.103	.116	.080	.126	.395	1.360	.810	.538	.502	.488	.484
28	.124	.088	.105	.080	.155	.402	1.580	.887	.488	.516	.506	.467
29	.110	.090	.105	.090		.445	1.350	1.050	.498	.498	.511	.459
30	.096	.090	.105	.090		.508	1.290	1.170	.463	.493	.506	.447
31	.092		.105	.100		.640		1.180		.484	.502	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE OKLAHOMA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN VERDIGRIS RIVER
STATION LOCATION VERDIGRIS RIVER AT
NOWATA, OKLAHOMA 109

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
3	26	62	4	4	3	3	0	2	3	4	147	14	61	11	208	18						
4	9	62	4	23	0	1	1	3	1	3	18	9	45	12	63	15						
4	16	62	4	30	0	1	2	3	2	3	20	9	40	12	60	21						
4	25	62	5	23	0	1	3	3	3	3	7	11	26	14	33	18						
4	30	62	5	25	0	1	1	2	1	2	25	11	61	15	86	19						
5	7	62	6	21	0	1	3	3	3	3	15	11	43	16	58	19						
5	14	62	6	19	0	1	3	3	3	3	9	10	30	15	39	18						
5	21	62	6	25	0	1	0	1	0	1	6	6	36	9	42	11						
5	28	62	6	29	0	1	1	2	1	2	15	14	35	19	50	24						
6	4	62	7	3	12	7	3	3	15	8	160	37	48	14	208	40						
6	11	62	7	9	-	-	-	-	-	-	78	17	61	16	139	23						
6	18	62	7	10	0	1	0	1	0	1	37	13	63	16	100	21						
6	25	62	7	20	1	1	2	2	3	2	26	10	38	12	64	16						
7	2	62	7	31	1	2	0	3	1	3	22	15	9	18	31	23						
7	23	62	8	2	0	1	0	1	0	1	3	11	58	15	61	19						
7	30	62	8	21	0	1	2	3	2	3	8	11	39	14	47	18						
8	6	62	8	17	0	1	0	2	0	2	3	12	42	15	45	19						
8	13	62	8	30	1	1	0	1	1	1	5	11	32	15	37	19						
8	20	62	10	7	0	1	1	3	1	3	4	10	27	16	31	19						
9	4	62	9	13	11	6	0	1	11	6	84	40	0	15	84	43						
9	10	62	9	25	4	4	0	0	4	4	93	38	73	9	166	39						
9	17	62	10	10	4	7	1	1	5	7	123	66	41	14	164	67						
9	24	62	10	18	10	10	0	1	10	10	115	42	29	7	144	43						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OKLAHOMA

MAJOR BASIN SOUTHWEST—LOWER MISSISSIPPI RIVER

MINOR BASIN VERDIGRIS RIVER

STATION LOCATION VERDIGRIS RIVER AT

NOWATA, OKLAHOMA 109

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
3	19	62	37400	50	50	90	0	400	*	17290	760	1920	110	65	7	71	7	68	4	91	2	51	2	92	1	61	1	60	1				
4	2	62	800	80	0	0	0	150	60	100	410	100	20	92	1																		
4	16	62	51200	8650	0	4370	0	10800	1080	25050	1280	4550	410	71	7	69	6	57	6	9	5	3	5	25	5	51	5	68	3	61	2	60	2
5	7	62	28200	80	300	3120	*	340	1060	17680	1860	3670	840	71	7	50	5	60	3	30	3	91	2	88	2	38	2	68	2	17	1	33	1
5	21	62	15300	0	80	1350	40	760	0	12110	970	5740	420	71	7	38	3	57	3	40	2	92	1	91	1	88	1						
6	4	62	7100	0	0	210	0	210	80	3110	3480	1080	500	71	5	88	3	92	3	86	1	69	1	97	1	68	1	80	1				
6	18	62	5500	420	0	300	0	0	0	2740	2030	1220	680	71	5	88	3	2	2	92	2	87	1	85	1								
7	2	62	10900	0	0	170	0	0	0	1600	9070	720	420	86	4	88	4	71	4	89	3	92	3	87	1	69	1						
7	16	62	7000	170	0	380	0	130	0	4980	1310	840	760	71	5	68	3	88	1	38	1	69	1										
8	6	62	3700	60	0	430	0	930	60	1820	410	410	40	68	3	51	3	71	2	38	1												
8	20	62	2800	250	0	100	0	330	370	1370	370	290	250	68	3	71	3	63	2	2	1	51	1	88	1								
9	4	62	1900	40	40	60	0	290	0	500	950	170	120	88	2	89	1	68	1	71	1												
9	17	62	4100	20	0	0	0	330	20	2190	1490	580	0	68	4	88	2	71	1	87	1												
*3	19	62							18760																								
*5	7	62					3760																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OKLAHOMA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN VERDIGRIS RIVFR
STATION LOCATION VERDIGRIS RIVER AT
NOWATA, OKLAHOMA 109

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																		
														ROTIFERS											CRUSTACEA							
														NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)						NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH						1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
3	19	62	82	64	86	15	92	9	27	5	7	20	20	37	21	3	11	1							0							0	0
4	2	62	92	38	86	18	51	7	82	5	32	20	0	3											0							1	0
4	16	62	82	49	80	34	27	3	86	3	11	120	20	28	17	1	11	1	15	1					4							0	0
5	7	62	80	61	82	21	86	4	56	1	13	80	0	126	11	5	2	1	21	1	15	1			0							0	0
5	21	62	82	91	80	3	92	2	86	1	3	80	0	554	22	6	2	6	11	5	21	3	17	1	0							0	0
6	4	62	80	24	71	20	92	18	53	6	32	40	0	0											0							0	0
6	18	62	80	64	56	8	71	3	92	2	23	0	0	0											0							0	0
7	2	62	80	69	58	6	56	3	82	3	19	80	0	1											0							0	0
7	16	62	80	41	26	19	58	7	53	6	27	0	0	0											0							0	0
8	6	62	26	44	82	24	57	12	58	3	17	0	0	707	17	6	46	6	2	5	22	5	21	3	12	50	2	53	1			0	0
8	20	62	82	46	26	39	27	4	57	1	10	0	0	125	22	4	17	3	16	3	2	1	15	1	0							0	0
9	4	62	75	16	80	6	26	6	71	4	68	0	0	-											-							-	-
9	17	62	26	45	82	4	92	4	71	3	44	0	0	-											-							-	-

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE OKLAHOMA
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN VERDIGRIS RIVER
STATION LOCATION VERDIGRIS RIVER AT
NOWATA, OKLAHOMA 109

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
5	24	62	6	1	5108	196	109	87	2	22	27	1	1	22	3	18	13	1	26
7	1	62	7	8	5032	123	58	65	1	16	18	1	1	14	2	8	3	1	11
8	11	62	8	19	5020	202	86	116	1	22	25	1	1	21	2	14	8	3	13
9	6	62	9	14	5010	201	79	122	1	18	26	1	1	22	2	11	7	2	14

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE OKLAHOMA

MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER

MINOR BASIN VERDIGRIS RIVER

STATION LOCATION VERDIGRIS RIVER AT

NOWATA, OKLAHOMA 109

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
3	26	62	-	-	-	-	-	-	-	-	64	136	184	10	-	46	.0	329	-
4	16	62	-	-	-	-	-	-	-	-	75	-	-	10	-	50	.0	437	-
4	23	62	-	-	-	-	-	-	-	-	84	-	-	5	-	180	.0	416	-
5	7	62	-	-	-	-	-	-	-	-	75	-	-	10	-	65	.1	446	-
5	21	62	-	-	-	-	-	-	-	-	110	212	288	10	-	58	.0	507	-
5	28	62	-	-	8.1	-	-	-	-	-	115	224	300	-	48	60	.0	508	-
6	4	62	22.0	-	8.0	-	-	-	-	-	90	224	272	10	547	56	.0	475	-
6	11	62	-	-	7.9	-	-	-	-	-	-	136	184	-	160	-	-	-	-
6	18	62	-	-	8.2	-	-	-	-	-	62	140	170	15	140	35	.0	318	-
6	25	62	-	-	8.4	-	-	-	-	-	73	164	200	15	*25	37	.0	325	-
6	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600
7	2	62	-	-	8.2	-	-	-	-	-	67	160	210	10	*25	35	.0	350	-
7	3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
7	10	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120
7	16	62	-	-	8.1	-	-	-	-	-	-	164	204	-	89	-	-	-	-
7	17	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	530
7	24	62	29.0	-	8.4	-	-	-	-	.0	66	152	192	10	46	30	.0	314	100
7	30	62	27.0	-	8.4	-	-	-	-	.0	99	160	212	-	32	42	.0	433	-
7	31	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*20
8	6	62	29.0	-	8.4	-	-	-	-	.4	129	148	208	5	33	37	.1	415	-
8	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
8	13	62	29.0	-	8.1	-	-	-	-	.0	46	156	240	10	27	125	.1	425	-
8	14	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
8	20	62	-	-	-	-	-	-	-	-	105	124	200	0	-	50	.3	388	-
8	21	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170
8	27	62	-	-	-	-	-	-	-	-	132	138	220	0	-	53	.0	445	-
8	28	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
9	4	62	-	-	-	-	-	-	-	-	128	84	128	15	25	25	.0	365	1000
9	10	62	-	-	-	-	-	-	-	-	56	100	132	30	82	36	.0	260	-
9	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
9	18	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2800
9	24	62	-	-	-	-	-	-	-	-	22	88	100	30	*25	18	.1	192	-
9	25	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Lenapah, Oklahoma
Supplied by U.S. Army Corps of Engineers

STATE Oklahoma

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Verdigris River

STATION LOCATION Verdigris River at
Nowata, Oklahoma

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	11.400	17.900	7.350	1.520	5.760	1.040	1.730	1.690	1.040	1.440	.079	.044
2	11.600	15.900	7.150	1.400	6.050	.685	1.270	.638	1.170	.788	.082	.049
3	11.300	21.500	6.350	1.370	6.550	.615	1.170	.615	2.150	.570	.069	.283
4	8.650	24.000	5.670	1.370	6.750	.638	1.020	.660	4.920	.450	.062	.097
5	5.440	26.400	5.490	1.400	7.050	.788	.760	.454	2.860	.314	.058	.082
6	3.040	20.700	5.220	1.740	7.150	.815	.760	.319	2.420	.214	.054	.166
7	2.260	2.970	4.020	2.040	6.340	.735	1.170	.277	3.650	.176	.112	.142
8	1.390	2.120	3.200	1.740	3.970	.735	1.370	.257	3.860	.372	.119	.250
9	1.020	3.700	3.560	1.500	2.490	.685	.898	.214	3.700	.422	.127	1.140
10	.992	6.950	6.590	1.300	1.960	.660	.815	.192	2.820	.347	.092	.334
11	2.450	7.850	4.980	1.200	1.740	.660	1.270	.176	.266	.660	.062	.140
12	8.850	8.180	2.640	1.100	1.660	.760	1.040	.166	2.980	1.390	.055	.079
13	11.200	9.100	2.640	1.300	1.740	.788	.815	.154	3.460	1.400	.076	.056
14	8.530	13.500	3.600	1.200	1.630	.870	.710	.142	3.950	1.100	.062	.046
15	7.500	12.800	3.440	1.100	1.550	1.040	.735	.125	3.950	.898	.049	5.190
16	6.000	15.100	3.450	1.100	1.520	.925	.592	.108	2.880	.685	.038	3.830
17	7.530	18.000	6.020	1.000	1.520	.638	.490	.100	1.300	.615	.031	3.010
18	8.920	14.500	6.750	.900	1.820	.530	.470	.094	.815	.550	.024	.955
19	7.980	3.470	7.250	.900	2.260	.486	.510	.090	.685	.440	.021	5.750
20	6.880	3.120	5.130	.900	2.260	.660	.530	.085	.458	.308	.019	12.900
21	4.790	5.980	3.600	1.000	2.260	2.650	.426	.078	.408	.212	.017	9.810
22	2.140	13.200	2.880	1.200	2.120	7.980	.415	.070	.550	.154	.016	13.400
23	1.440	10.800	2.640	1.300	1.890	4.380	.450	.066	.510	.109	.016	14.100
24	1.230	5.410	2.490	1.370	1.740	3.700	.446	.062	.490	.082	.018	9.880
25	.930	3.280	2.260	1.440	1.540	5.160	.408	.058	.570	.073	.027	6.580
26	.960	5.080	2.190	2.450	1.440	6.200	.380	.055	.570	.066	.044	7.730
27	.960	6.450	2.040	5.680	1.370	5.900	.371	.052	.570	.059	.041	8.140
28	.930	7.150	1.960	9.450	1.300	5.160	.466	.051	1.210	.062	.043	8.250
29	.930	7.350	1.890	7.350		4.540	.426	.159	2.260	.079	.050	8.140
30	2.130	7.350	1.740	4.730		3.220	2.830	.236	1.960	.075	.049	11.600
31	13.700		1.590	4.700		2.420		.234		.070	.043	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE INDIANA
MAJOR BASIN OHIO RIVER
MINOR BASIN WABASH RIVER
STATION LOCATION WABASH RIVER AT
NEW HARMONY, INDIANA 105

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
1	10	62	1	18	1	2	1	1	2	2	113	9	62	7	175	12						
1	20	62	1	29	5	3	3	2	8	4	224	11	57	11	281	16						
1	27	62	2	6	3	2	1	1	4	2	145	10	51	6	196	12						
2	3	62	2	12	3	3	1	1	4	3	144	14	64	6	208	15						
2	10	62	2	21	1	1	2	2	3	2	67	7	55	7	122	10						
2	17	62	2	26	0	1	0	2	0	2	30	10	35	10	65	14						
2	24	62	3	6	3	5	0	2	3	5	202	17	54	16	256	23						
3	3	62	3	15	3	3	1	1	4	3	208	11	50	6	258	12						
3	10	62	3	20	0	1	0	1	0	1	90	9	56	8	146	12						
3	17	62	3	30	2	2	0	1	2	2	133	8	69	7	202	11						
3	24	62	4	4	7	5	0	1	7	5	245	13	60	15	305	20						
3	31	62	4	16	3	2	1	1	4	2	101	8	57	7	158	11						
4	7	62	4	18	10	6	1	1	11	7	84	11	33	6	117	13						
4	14	62	4	25	7	8	1	2	8	8	37	6	144	20	181	21						
4	21	62	5	23	2	2	0	1	2	2	8	18	53	18	61	25						
5	5	62	6	11	1	2	1	1	2	2	51	11	25	9	76	14						
5	12	62	6	15	10	6	0	0	10	6	70	12	41	8	111	14						
5	19	62	7	27	4	4	1	2	5	4	56	6	31	5	87	8						
5	26	62	7	2	20	13	2	2	22	13	260	52	34	14	294	54						
6	3	62	7	2	0	4	0	2	0	4	90	17	35	8	125	19						
6	9	62	7	5	1	2	0	1	1	2	30	14	35	15	65	21						
6	16	62	7	12	19	22	0	2	19	22	407	106	33	10	440	106						
6	25	62	7	18	32	18	0	1	32	18	371	82	42	8	413	82						
6	30	62	7	25	1	1	2	2	3	2	14	13	19	14	33	19						
7	11	62	8	6	1	1	2	1	3	1	9	7	26	9	35	11						
7	16	62	8	14	1	1	0	1	1	1	19	12	30	13	49	18						
7	23	62	8	7	7	4	0	0	7	4	53	11	43	8	96	14						
7	28	62	8	21	1	1	0	1	1	1	125	10	49	11	174	15						
8	4	62	8	15	6	4	1	2	7	4	60	18	19	13	79	22						
8	11	62	10	8	3	2	0	1	3	2	16	27	18	9	34	28						
8	18	62	8	31	0	4	0	1	0	4	51	64	14	8	65	64						
8	27	62	9	6	3	2	0	2	3	3	25	14	23	13	48	19						
9	8	62	9	21	1	1	1	2	2	2	14	14	20	16	34	21						
9	15	62	10	2	1	1	0	1	1	1	15	8	36	10	51	13						
9	22	62	10	15	5	4	0	1	5	4	37	30	25	8	62	31						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE INDIANA
MAJOR BASIN OHIO RIVER
MINOR BASIN WABASH RIVER
STATION LOCATION WABASH RIVER AT
NEW HARMONY, INDIANA

105

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
1	10	62	4200	0	70	140	0	380	20	1190	2410	740	470	82	3	92	1	87	1	51	1												
1	22	62	1300	50	20	50	0	90	0	500	590	290	200	68	2	92	1																
2	6	62	500	0	20	0	0	20	0	340	90	870	380	71	1	68	1																
2	10	62	1400	160	140	110	0	340	0	230	470	140	180	51	1																		
2	19	62	1300	20	0	20	0	210	0	410	680	80	80																				
3	5	62	300	0	0	20	0	0	0	130	110	600	160																				
3	19	62	500	0	0	0	0	20	20	200	290	110	160																				
4	3	62	2200	0	0	40	0	370	170	1180	390	150	20	68	3	71	2	51	1														
4	17	62	73200	180	20	790	0	3170	200	61210	7510	3890	630	71	9	88	5	92	4	68	4	57	4	51	4	69	2	34	2	25	1	87	1
5	1	62	79800	2070	250	18420	210	3520	750	50430	4180	28240	750	71	9	34	5	24	5	51	5	3	4	32	4	57	3	30	3	60	3	92	3
5	17	62	6700	20	210	420	230	740	0	3170	1900	3550	1940	71	5	57	3	88	2	50	1	17	1	92	1	24	1	68	1	82	1		
5	29	62	18600	0	0	2660	930	250	0	13590	1180	10000	1440	68	5	71	5	24	4	50	3	38	2	30	1	91	1	88	1	85	1	35	1
6	2	62	5300	0	0	540	40	370	80	2260	1970	1300	500	68	4	71	3	88	2	87	2	92	2	24	2	51	1						
6	25	62	1100	20	0	40	0	150	20	370	480	440	60	68	1	88	1																
7	10	62	9200	40	0	360	0	40	0	6080	2700	4350	1650	68	5	71	3	88	3	87	3	69	2	92	2	86	1	79	1	82	1	85	1
7	23	62	7100	0	0	170	0	110	0	5700	1140	1140	760	68	5	67	2	69	2	87	1	88	1	92	1	38	1						
8	6	62	29900	410	0	3110	*	1080	170	19750	2280	3560	120	68	7	50	5	24	4	92	4	69	3	51	3	38	3	88	2	25	2	71	1
8	21	62	38000	290	40	9560	80	1570	0	22770	3730	7870	790	68	8	24	6	71	5	88	4	51	3	38	3	25	2	40	2	32	2	35	2
9	4	62	13400	320	0	3510	0	70	50	6620	790	4950	740	68	6	24	4	38	3	3	2	25	2	71	1								
9	18	62	17600	250	80	2030	410	660	250	10470	3400	5420	1040	68	6	69	4	87	4	24	3	71	3	88	3	51	3	50	2	38	2	60	1
*8	6	62					3100																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE INDIANA

MAJOR BASIN OHIO RIVER

MINOR BASIN WABASH RIVER

STATION LOCATION WABASH RIVER AT

NEW HARMONY, INDIANA 105

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)*									FUNGI AND SHEATHED BACTERIA *Number per ml.*	MICROINVERTEBRATES																				
			1ST		2ND		3RD		4TH				PROTOZOA *(Identifiable) Number per ml.*	ROTIFERS											CRUSTACEA							NEMATODES *(Identifiable) Number per liter*	OTHER ANIMAL FORMS *(Number per liter)*
														NUMBER PER LITER	GENERA AND COUNT LEVEL *(See text for Codes)*										NUMBER PER LITER	GENERA AND COUNT LEVEL *(See text for Codes)*							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
1	10	62	36	38	92	16	71	6	21	3	37	250	0	0											0							0	0
1	22	62	92	26	26	16	21	8	36	8	42	340	0	0											0							0	0
2	6	62										20	0	0											0							0	0
2	10	62										200	0	1											0							0	0
2	19	62										210	0	0											0							0	0
3	5	62	26	24	82	18	92	16	36	5	37	0	0	0											0							0	0
3	19	62	26	12	82	10	86	8	65	7	63	0	0	0											0							0	0
4	3	62	26	12	86	11	92	10	36	8	59	0	0	0											0							0	0
4	17	62	82	35	91	12	67	11	80	5	37	0	0	1											0							0	0
5	1	62	82	72	92	8	36	3	26	3	14	700	0	21	21	1	11	1							0							0	0
5	17	62	82	21	71	16	92	11	36	7	45	0	0	0											0							0	0
5	29	62	26	29	82	21	23	15	30	6	29	0	0	25	22	2	11	1							1							0	1
6	2	62	26	15	82	12	92	9	23	7	57	0	0	0											0							0	0
6	25	62	26	27	82	18	86	10	71	5	40	0	0	0											0							0	0
7	10	62	26	24	82	12	58	11	23	10	43	0	0	0											0							0	0
7	23	62	26	37	82	6	92	6	20	6	45	0	0	-											-							-	-
8	21	62	26	69	82	11	23	9	27	7	4	0	0	116	22	3	2	3	17	3	11	2	15	2	0							0	0
8	6	62	26	57	58	16	30	9	89	4	14	0	0	1590	22	8	21	4	2	3	15	3	11	2	0							0	0
9	4	62	26	94	82	4	23	1	70	1		0	0	216	22	6	2	3							0							0	1
9	18	62	26	74	82	10	65	3	23	2	11	0	0	0											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE INDIANA

MAJOR BASIN OHIO RIVER

MINOR BASIN WABASH RIVER

STATION LOCATION WABASH RIVER AT
NEW HARMONY, INDIANA 105

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
4	2	62	4	9	4663	123	51	72	1	10	28	4	2	22	0	5	3	1	3
4	30	62	5	6	4399	170	69	101	9	16	24	2	2	19	1	8	5	1	6
6	3	62	6	12	6121	89	33	56	1	8	11	1	1	9	0	4	2	1	6
7	10	62	7	18	5253	114	47	67	0	9	16	1	1	13	1	6	4	1	11
8	4	62	8	11	4765	123	45	78	1	9	15	2	1	11	1	5	3	1	11
9	8	62	9	15	4813	126	50	76	1	12	18	1	1	15	1	7	3	1	8

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE INDIANA
MAJOR BASIN OHIO RIVER
MINOR BASIN WABASH RIVER
STATION LOCATION WABASH RIVER AT
NEW HARMONY, INDIANA 105

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
1	9	62	.0	-	8.2	1.8	-	-	-	-	15	140	210	10	300	38	-	-	-
1	22	62	1.0	12.6	8.2	-	-	-	-	-	9	-	132	10	400	50	-	-	-
1	24	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2600
2	5	62	3.0	11.6	7.7	2.4	-	-	-	-	8	100	150	20	200	30	-	198	-
2	7	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16000
2	19	62	3.0	11.2	-	2.0	-	-	-	-	16	170	244	5	100	54	-	-	-
2	20	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9000
3	5	62	3.0	12.0	8.0	2.8	-	-	-	-	9	86	136	15	200	30	-	127	2600
3	19	62	6.0	11.0	8.2	2.1	-	-	-	-	10	112	170	20	75	43	-	253	-
4	3	62	9.0	10.2	8.2	2.0	-	-	-	-	12	152	222	5	75	49	-	290	3000
4	17	62	9.0	11.5	8.2	3.3	49	-	-	-	15	187	255	5	40	24	-	-	4000
5	1	62	20.0	9.0	8.2	5.4	-	-	-	-	19	190	268	5	30	38	-	334	1200
5	17	62	23.0	6.0	8.2	5.1	50	-	-	-	12	147	222	15	300	50	-	301	-
5	26	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	-
6	9	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
6	12	62	-	6.8	8.1	2.5	39	-	-	-	16	176	266	5	500	50	-	377	22000
6	25	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15000
6	26	62	-	6.8	8.0	4.8	-	-	-	-	26	136	202	10	700	50	-	301	-
7	10	62	20.0	5.0	8.0	2.2	-	-	-	-	13	136	200	15	270	95	-	304	-
7	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.5	-	-
7	23	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
7	24	62	20.0	6.7	8.1	4.4	23	-	-	-	10	140	204	20	320	43	-	-	-
7	28	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
8	4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
8	6	62	20.0	7.9	8.6	3.8	-	-	-	-	14	194	260	10	50	55	-	319	14000
8	11	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
8	21	62	31.0	-	8.4	3.0	74	-	-	-	21	170	278	20	30	86	.4	353	3000
8	27	62	-	-	-	-	-	-	-	-	-	-	-	5	85	-	.0	-	-
9	4	62	25.0	9.0	8.2	5.0	-	-	-	-	25	168	256	10	60	98	.4	328	-
9	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7000
9	8	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
9	15	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	-
9	18	62	23.0	5.0	8.0	4.7	-	-	-	-	17	134	208	10	250	78	.2	277	1000

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Mount Carmel, Illinois
Operated by U.S. Geological Survey

STATE Indiana
MAJOR BASIN Ohio River
MINOR BASIN Wabash River
STATION LOCATION Wabash River at New Harmony, Indiana

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	9.900	7.140	14.600	12.500	74.100	77.700	93.000	16.000	18.500	9.240	19.200	7.200
2	9.760	7.420	13.400	11.300	76.800	83.400	81.700	27.000	18.200	8.780	17.400	8.360
3	9.440	7.590	12.400	11.000	80.100	89.400	72.300	34.200	17.700	8.920	15.400	8.640
4	9.020	7.450	11.700	11.300	82.800	96.500	64.400	36.800	16.400	8.460	13.700	8.360
5	8.640	7.620	11.300	12.000	82.800	102.000	56.600	35.900	15.500	10.700	12.500	8.220
6	8.120	8.640	11.500	14.800	76.400	107.000	50.000	32.300	14.400	19.200	11.600	8.920
7	7.660	8.920	11.500	23.600	69.200	108.000	44.000	28.000	14.200	22.200	13.900	9.970
8	7.280	9.160	11.800	29.400	64.100	102.000	40.600	25.500	15.400	20.500	14.400	10.700
9	6.920	8.990	12.400	34.000	61.000	91.600	39.800	23.000	17.300	17.500	14.900	9.520
10	6.640	8.500	12.500	38.300	59.000	80.600	40.700	22.000	19.100	14.700	13.400	8.570
11	6.440	8.040	12.800	42.200	56.600	72.200	39.400	24.700	20.000	12.700	11.700	7.700
12	6.130	7.660	13.400	40.200	53.100	69.000	37.400	34.900	24.600	11.800	10.600	7.170
13	5.950	7.280	15.600	31.000	46.600	70.400	35.200	40.500	30.700	11.100	9.900	7.170
14	5.680	7.030	17.600	23.800	39.300	72.200	33.100	42.100	34.000	10.500	9.060	7.560
15	5.650	6.890	16.600	23.900	34.400	73.500	31.200	41.800	31.200	13.100	8.430	10.600
16	5.620	7.480	15.300	29.600	32.100	74.300	29.100	37.600	25.600	24.200	7.870	14.400
17	5.680	7.900	16.100	37.400	30.900	74.400	26.700	31.800	21.500	34.000	7.450	16.000
18	5.860	9.100	18.800	40.400	30.000	74.000	24.800	26.700	19.200	42.200	7.100	14.300
19	5.950	10.400	21.000	41.100	28.600	71.500	23.400	23.000	17.200	49.600	6.820	12.300
20	5.860	11.900	22.800	40.200	28.200	68.000	22.200	20.400	15.200	54.500	6.580	9.900
21	5.740	14.500	24.500	37.800	29.100	68.600	21.000	18.600	13.700	57.300	6.340	8.680
22	5.650	15.300	25.200	46.000	30.600	70.700	20.000	17.400	12.200	54.500	6.190	8.150
23	5.530	14.700	23.900	55.000	32.800	72.800	19.100	16.300	14.200	43.900	6.040	7.620
24	5.530	15.000	22.800	55.900	39.500	77.600	18.400	15.400	15.200	36.700	5.950	7.310
25	5.650	15.400	22.900	55.200	46.800	83.900	17.700	15.300	12.600	35.100	6.040	7.100
26	5.650	16.300	22.100	55.000	53.800	93.800	17.200	15.300	11.600	35.400	5.890	6.890
27	5.770	17.700	20.400	57.500	62.800	106.000	16.600	14.900	12.000	36.000	6.100	6.470
28	6.190	18.100	19.200	65.400	71.200	116.000	16.000	14.700	11.600	35.400	6.470	6.160
29	6.190	17.400	18.000	69.400		122.000	15.500	15.700	10.700	30.700	6.890	6.040
30	6.220	16.000	16.400	71.400		120.000	15.200	17.600	10.100	24.800	7.100	5.890
31	6.540		14.400	72.500		109.000		18.300		21.200	6.960	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE OREGON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN WILLAMETTE RIVER

STATION LOCATION WILLAMETTE RIVER AT PORTLAND, OREGON 124

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	MO.	DAY	μμc/g	±	μμc/g	±
8	14	62	8	30	0	0	0	0	0	0	1	5	2	5	3	7						
8	28	62	9	19	0	0	0	0	0	0	4	6	1	8	5	10						
9	7	62	9	24	0	0	0	0	0	0	3	4	8	5	11	6						
9	14	62	10	8	1	1	0	0	1	1	5	4	1	5	6	6						

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OREGON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN WILLAMETTE RIVER
STATION LOCATION WILLAMETTE RIVER AT
PORTLAND, OREGON

124

DATE OF SAMPLE			ALGAE (Number per milliliter)										INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS					1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
8	14	62	2300	0	0	310	0	230	660	810	330	210	250	69	3	60	2	51	1														
9	7	62	1700	0	0	250	0	80	0	890	510	250	550	71	2	69	1	92	1	77	1												

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE OREGON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN WILLAMETTE RIVER

STATION LOCATION WILLAMETTE RIVER AT

PORTLAND, OREGON 124

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)									FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES																		
			1ST		2ND		3RD		4TH				PROTOZOA (Identifiable) Number per ml.	ROTIFERS											CRUSTACEA						NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
														NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUM-BER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)						
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	OTHER SPECIES PERCENT				GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUN. LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
8	14	62	47	34	58	24	82	15	9	7	20	0	0	310	17	5	11	5	21	4	22	2			12	50	3					0	0
9	7	62	58	31	82	20	92	18	47	6	25	0	0	151	17	4	11	3	22	3	21	3	12	1	24	53	3	76	2	50	1	0	0

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE OREGON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN WILLAMETTE RIVER

STATION LOCATION WILLAMETTE RIVER AT
PORTLAND, OREGON 124

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
8	14	62	-	-	-	-	-	-	-	-	4	32	36	10	-	4	.0	36	710
8	28	62	-	-	-	-	-	-	-	-	4	32	28	10	-	7	.0	33	1100
9	7	62	19.8	4.7	6.8	2.1	-	-	-	-	6	32	52	10	25	7	.0	80	*10
9	14	62	20.4	3.3	-	1.8	-	-	-	-	5	36	40	10	*25	7	.0	80	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Salem, Oregon
Data Supplied by U.S. Geological Survey

STATE Oregon

MAJOR BASIN Pacific Northwest

MINOR BASIN Willamette River

STATION LOCATION Willamette River at
Portland, Oregon

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	6.100	14.600	53.500	43.200	13.900	16.700	41.600	33.600	19.000	8.030	5.700	5.700
2	5.900	13.900	58.300	40.000	13.200	16.400	38.000	32.000	17.800	7.740	5.700	5.700
3	5.900	13.900	54.100	38.800	12.900	18.200	33.900	31.200	17.800	7.450	5.900	5.900
4	6.850	19.600	44.900	47.400	12.500	19.900	32.000	40.800	18.000	7.200	6.350	5.900
5	6.850	19.500	41.100	47.700	12.000	22.800	28.700	43.800	17.400	6.950	7.100	5.700
6	7.500	17.600	44.900	46.000	11.500	25.800	32.000	40.500	16.600	6.700	7.100	6.100
7	7.850	15.600	38.800	48.500	12.200	28.400	37.500	36.400	15.900	6.450	6.850	5.900
8	8.150	14.200	34.500	50.800	14.400	28.700	43.500	32.800	14.600	6.200	7.100	6.100
9	8.150	13.200	31.700	47.900	16.000	26.000	53.200	32.200	14.800	5.980	7.850	5.900
10	8.450	11.800	27.800	44.900	19.600	25.000	50.200	35.000	15.000	6.200	7.850	5.900
11	10.600	11.800	25.800	36.400	25.300	23.800	45.400	35.600	14.800	5.980	7.350	6.350
12	11.500	12.900	20.600	31.400	23.300	22.800	38.300	35.600	14.200	5.980	7.100	7.850
13	11.500	13.900	21.000	29.200	21.000	26.000	34.400	33.400	13.600	5.760	6.600	8.750
14	13.200	13.200	19.200	26.800	27.700	19.000	30.300	29.500	13.200	5.760	6.600	8.450
15	10.900	13.600	23.800	25.000	36.100	18.000	30.000	26.600	12.800	5.980	6.350	7.600
16	9.050	13.200	28.400	24.600	32.800	17.600	28.700	23.800	12.200	5.980	5.700	6.850
17	8.750	12.900	33.900	22.800	29.500	17.600	25.800	21.900	11.800	5.980	5.900	6.600
18	10.600	11.800	51.700	22.800	33.100	17.400	24.800	19.200	11.500	5.760	5.900	6.850
19	11.200	9.950	59.700	22.800	33.100	17.200	24.600	18.000	11.500	5.760	5.900	7.350
20	10.800	9.350	98.000	20.800	27.900	17.200	24.300	17.000	11.100	5.760	6.100	6.350
21	10.800	9.650	121.000	17.800	23.800	18.200	21.700	17.000	10.800	5.760	6.100	6.350
22	10.300	9.950	132.000	15.600	19.900	20.100	19.200	17.200	10.400	5.760	6.100	7.350
23	8.750	49.900	110.000	13.300	18.400	24.600	18.200	17.200	10.100	5.760	5.900	6.850
24	10.900	76.800	89.000	13.400	18.000	27.400	17.600	17.600	9.800	5.540	5.900	6.350
25	13.600	56.500	81.000	13.200	16.800	47.400	16.800	17.600	9.800	5.320	5.900	6.600
26	12.500	67.400	77.400	13.400	15.300	89.300	16.200	21.900	9.500	5.320	5.900	6.850
27	12.200	80.800	70.000	14.200	14.100	110.000	19.400	27.900	9.800	5.320	5.900	6.600
28	18.800	59.000	63.900	13.900	14.000	110.000	43.000	26.600	9.500	5.320	5.900	6.600
29	25.300	60.400	59.400	14.400		91.200	44.600	24.800	8.900	5.320	5.900	7.600
30	20.100	54.100	55.300	14.200		67.200	38.600	21.400	8.320	5.320	5.900	8.450
31	16.800		48.500	14.200		51.400		19.900		5.320	5.700	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN YAKIMA RIVER
STATION LOCATION YAKIMA RIVER AT
RICHLAND, WASHINGTON 89

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	13	0	0	1	1	1	1	0	5	6	7	6	9						
10	9	61	10	26	0	0	1	1	1	1	3	4	14	6	17	7						
10	16	61	10	31	0	1	0	1	0	1	21	5	35	6	56	8						
10	22	61	11	1	0	1	2	2	2	2	6	4	23	7	29	8						
10	30	61	11	7	0	1	3	2	3	2	3	5	12	7	15	9						
11	6	61	11	16	0	0	4	2	4	2	1	4	9	6	10	7						
11	13	61	11	24	0	0	0	0	0	0	5	5	10	7	15	9						
11	20	61	12	4	0	1	3	1	3	1	2	4	7	5	9	6						
11	27	61	12	6	0	0	2	1	2	1	1	5	13	7	14	9						
12	4	61	12	12	0	1	2	1	2	1	7	5	8	7	15	9						
12	18	61	12	28	0	0	2	1	2	1	11	4	19	6	30	7						
1	2	62	1	12	0	1	0	1	0	1	11	4	11	5	22	6						
1	8	62	1	25	-	-	-	-	-	-	8	6	9	6	17	9						
1	15	62	1	24	0	1	0	1	0	1	7	6	12	6	19	8						
1	22	62	1	31	0	1	1	1	1	1	11	5	8	5	19	7						
1	29	62	2	8	1	1	1	1	2	1	6	5	9	5	15	7						
2	5	62	2	15	0	1	0	1	0	1	16	5	10	5	26	7						
2	12	62	2	21	0	1	1	1	1	1	16	4	11	5	27	6						
2	19	62	3	5	0	1	2	1	2	1	5	4	12	8	17	9						
2	26	62	3	12	0	0	1	1	1	1	5	4	10	5	15	6						
3	5	62	3	15	0	1	1	1	1	1	7	4	10	5	17	6						
3	12	62	3	23	0	1	1	1	1	1	2	4	3	4	5	5						
3	19	62	3	28	0	0	1	1	1	1	3	4	8	5	11	6						
3	26	62	4	5	0	1	1	1	1	1	9	4	12	5	21	6						
4	2	62	4	13	0	1	1	1	1	1	17	4	13	5	30	6						
4	16	62	5	1	1	1	0	1	1	1	15	5	9	5	24	7						
4	23	62	5	23	0	0	0	0	0	0	0	5	3	6	3	7						
4	30	62	6	4	0	0	0	1	0	1	2	5	9	6	11	7						
5	7	62	6	8	0	0	1	1	1	1	7	5	11	5	18	7						
5	14	62	6	21	0	1	0	1	0	1	3	6	15	6	18	8						
5	21	62	6	26	1	1	1	1	2	1	5	5	12	7	17	9						
5	28	62	7	6	1	1	0	0	1	1	7	6	10	7	17	9						
6	4	62	7	5	0	1	0	0	0	1	3	5	9	7	12	9						
6	11	62	7	11	0	1	1	1	1	1	4	6	10	7	14	9						
6	18	62	7	13	1	1	0	0	1	1	8	4	5	4	13	6						
6	25	62	7	20	0	1	0	1	0	1	6	5	4	6	10	7						
7	2	62	8	1	-	-	-	-	-	-	6	7	10	8	16	11						
7	23	62	8	15	0	0	1	1	1	1	0	6	4	7	4	9						
7	30	62	9	19	-	-	-	-	-	-	2	6	15	8	17	10						
8	7	62	8	27	-	-	-	-	-	-	1	3	12	3	13	4						
8	13	62	8	30	-	-	-	-	-	-	14	7	12	9	26	11						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN YAKIMA RIVER
STATION LOCATION YAKIMA RIVER AT
RICHLAND, WASHINGTON 89

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER																RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA								DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL						ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±	μμc/l	±			MO.	DAY	μμc/g	±	μμc/g	±
8	20	62	9	6	0	1	1	1	1	1	2	5	12	7	14	9								
8	27	62	9	27	-	-	-	-	-	-	0	7	10	9	10	11								
9	4	62	9	28	-	-	-	-	-	-	3	5	11	7	14	9								
9	10	62	10	14	-	-	-	-	-	-	0	6	13	8	13	10								
9	24	62	10	18	0	1	1	2	1	2	0	5	13	8	13	9								

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN YAKIMA RIVER
STATION LOCATION YAKIMA RIVER AT
RICHLAND, WASHINGTON 89

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILAMENTOUS	COCCOID	FILAMENTOUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	2500	0	40	60	0	0	0	810	1620	60	770	91	3	68	2	86	2	71	1												
10	16	61	6500	0	140	100	0	80	0	1410	4720	60	910	92	5	87	4	71	3	68	1												
11	6	61	2100	0	20	20	0	0	0	100	1970	20	540	92	3	87	2	82	2														
11	20	61	2100	50	50	70	0	70	0	160	1760	0	320	84	1																		
12	4	61	2300	0	0	0	0	[illegible]	0	270	2010	130	1320	92	3	82	3	87	2	68	1												
12	18	61	1000	0	0	0	0	0	0	80	870	0	120	87	2	92	1	82	1														
1	2	62	4700	180	0	50	0	0	0	520	3940	70	770	92	7	82	3	87	2	68	1	2	1										
1	15	62	2100	0	0	40	0	0	0	170	1880	40	680	92	3	82	2	87	1														
2	5	62	1200	0	0	0	0	0	0	70	1100	110	4330	92	2	82	1																
2	19	62	5400	40	0	0	0	80	20	540	4680	40	1280	92	4	87	3	82	2	68	2	79	2	88	1	73	1						
3	5	62	900	0	0	0	0	20	0	150	770	20	300	87	2																		
3	19	62	14100	0	0	0	0	80	80	970	12980	60	1080	87	7	71	3	82	3	92	2	88	1										
4	2	62	8100	0	0	120	0	0	0	1930	6040	170	1620	87	5	71	4	82	3	92	3	88	2										
4	16	62	4700	0	40	170	20	40	40	1820	2570	380	2430	71	4	92	3	87	2	82	2												
5	7	62	2800	0	0	210	0	20	0	910	1710	150	1200	82	2	68	2	71	2	87	2	92	1	88	1	79	1						
5	21	62	7500	0	0	40	0	0	0	1600	5870	170	2530	87	4	82	4	68	3	71	3	92	2	79	2	88	1	73	1				
6	4	62	2000	0	20	0	0	40	0	460	1520	170	2950	87	2	82	2	92	1	68	1	71	1										
6	18	62	7700	210	20	210	40	530	0	1000	5740	490	3120	87	4	68	3	57	2	92	2	88	2	79	1	73	1	85	1	81	1		
7	2	62	17600	930	130	1010	*	210	0	8440	4140	720	2150	68	6	50	5	71	4	2	3	82	3	40	2	92	2	87	2	69	1		
7	16	62	50400	170	0	2830	*	2910	40	35910	5190	3590	2410	71	8	68	7	92	5	50	5	51	5	40	3	38	2	69	2	88	2		
8	7	62	6000	0	0	410	0	310	20	1040	4260	410	2070	92	5	68	3	38	2	69	2	51	1										
8	20	62	20100	930	0	1040	60	620	20	11970	5510	1240	2820	68	6	71	6	92	5	2	3	51	3	38	2	87	1	69	1	3	1	30	1
9	4	62	8400	100	40	560	0	290	0	3480	3930	660	2110	68	5	92	5	38	1	51	1	69	1	82	1	71	1	79	1	87	1	40	1
9	17	62	700	0	0	60	0	20	0	190	480	110	1060	92	1	68	1																
*7	2	62					2700																										
*7	16	62					3290																										

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE WASHINGTON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN YAKIMA RIVER

STATION LOCATION YAKIMA RIVER AT
RICHLAND, WASHINGTON 089

DATE OF SAMPLE			DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes)								OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	PROTOZOA (Identifiable) Number per ml.	MICROINVERTEBRATES																			
														ROTIFERS											CRUSTACEA							NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
			1ST		2ND		3RD		4TH					NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)										NUMBER PER LITER	GENERA AND COUNT LEVEL (See text for Codes)							
															1ST		2ND		3RD		4TH		5TH			1ST		2ND		3RD			
MONTH	DAY	YEAR	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT	SPECIES	PERCENT					GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL		
10	2	61	92	60	64	9	65	7	16	4	20	0	0	4											0							0	1
10	16	61	92	67	65	21	64	5	36	3	4	0	0	16	15	1									0							0	0
11	6	61	92	34	65	26	36	23	64	3	14	0	0	0											0							0	0
11	20	61	36	45	65	29	92	19	64	3	4	90	0	6											0							0	0
12	4	61	92	37	36	33	65	20	66	5	5	0	0	6											0							0	1
12	18	61	65	32	92	30	36	23	66	1	14	20	0	10	8	1									0							1	0
1	2	62	92	35	36	28	65	12	97	5	20	20	0	4											0							0	1
1	15	62	92	31	36	18	16	5	97	5	41	0	0	0											0							1	2
2	5	62	92	48	36	19	52	7	16	5	21	50	0	1											1							1	2
2	19	52	92	30	36	9	65	8	46	8	45	310	0	1											0							3	0
3	5	62	65	30	92	10	66	9	36	8	43	0	0	0											1							4	0
3	19	62	65	77	36	7	66	7	92	2	7	0	0	4											0							0	0
4	2	62	65	39	36	15	92	15	66	11	20	40	0	10											1							0	8
4	16	62	92	38	36	18	65	16	16	4	24	40	0	0											0							0	0
5	7	62	36	26	92	13	65	13	16	7	41	40	0	1											0							0	0
5	21	62	36	29	65	16	66	11	64	8	36	210	0	5											1							1	1
6	4	62	36	22	92	18	65	15	16	6	39	0	0	1											1							0	0
6	18	62	36	25	64	12	65	10	92	9	44	0	0	3											0							0	0
7	2	62	36	34	92	23	26	8	64	5	30	40	0	1											0							0	0
7	16	62	82	47	26	31	92	18	70	1	3	40	0	41	2	2	6	2							0							0	0
8	7	62	92	86	26	8	16	2	36	1	3	0	0	37	2	1	21	1	15	1					6	51	1	76	1			0	0
8	20	62	92	50	82	21	26	20	70	1	8	0	0	48	2	3	15	1	22	1					0							0	9
9	4	62	92	70	36	7	16	6	26	4	13	60	0	3											0							0	0
9	17	62	92	41	65	15	36	11	26	7	26	0	0	1											0							0	0

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE WASHINGTON

MAJOR BASIN PACIFIC NORTHWEST

MINOR BASIN YAKIMA RIVER

STATION LOCATION YAKIMA RIVER AT
RICHLAND, WASHINGTON 89

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGENATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	5	61	12	7	2430	140	32	108	1	7	10	4	2	4	0	3	1	1	9
12	7	61	1	8	2330	165	41	124	0	6	21	6	5	10	0	4	1	1	8
1	8	62	2	20	3660	134	23	111	0	3	13	4	1	8	0	3	1	0	3
2	20	62	3	21	5140	78	22	56	0	4	10	2	1	7	0	3	1	0	4
3	21	62	4	30	2780	113	30	83	1	8	11	4	1	6	0	4	2	1	3
4	30	62	5	22	4570	81	28	53	1	8	9	1	1	6	1	3	2	0	5
5	22	62	6	19	2370	130	42	88	0	11	21	6	3	12	0	5	2	0	3
6	19	62	7	12	2170#	132	51	81	1	14	17	3	2	11	1	7	3	0	9
7	13	62	8	7	2640	170	62	108	1	12	20	3	2	15	0	6	3	1	19
8	7	62	8	30	3300	97	31	66	1	9	10	1	1	8	0	3	2	1	5
8	30	62	9	20	2600	103	28	75	1	8	13	3	2	8	0	3	1	1	1
9	20	62	10	9	3450#	59	10	49	0	3	5	1	1	3	0	1	0	0	1

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN YAKIMA RIVER
STATION LOCATION YAKIMA RIVER AT
RICHLAND, WASHINGTON 89

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	14.9	10.4	8.3	2.4	-	-	-	.1	10	160	120	-	8	30	-	154	200
10	9	61	13.4	10.5	8.4	1.3	-	-	-	.1	11	160	120	-	9	30	.0	147	*33
10	22	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170
10	23	61	10.7	9.5	8.3	1.0	-	-	-	.1	12	160	130	-	7	30	.0	166	-
10	30	61	9.3	10.8	8.4	1.2	-	-	-	.1	10	160	140	-	4	26	-	153	300
11	6	61	6.8	11.8	8.5	2.0	-	-	-	.1	10	150	120	-	5	39	-	240	*33
11	13	61	6.1	12.1	8.5	2.1	-	-	-	.1	10	150	130	-	6	64	-	224	130
11	20	61	4.5	12.0	8.5	1.9	-	-	-	.1	10	160	120	-	4	36	-	214	-
11	27	61	4.8	11.2	8.3	1.8	-	-	-	.1	15	140	110	-	5	33	.0	196	33
12	4	61	6.6	10.8	8.2	2.2	-	-	-	-	-	-	-	-	-	-	.0	-	67
12	18	61	3.0	11.0	8.4	1.6	-	-	-	-	-	-	-	-	-	-	.0	-	-
1	2	62	3.6	10.6	8.1	1.3	-	-	-	.2	8	100	80	-	7	24	-	161	250
1	8	62	5.8	10.5	8.0	1.4	13	-	-	.2	10	90	90	-	5	17	.0	186	920
1	15	62	1.5	11.2	7.6	2.5	-	-	-	.1	10	80	60	-	4	19	.0	-	430
1	22	62	.3	11.6	7.6	2.8	-	-	-	.1	10	100	90	-	5	24	-	117	*33
1	29	62	1.8	11.3	7.7	2.4	-	-	-	.1	10	90	80	-	5	19	3.0	112	100
2	5	62	4.6	11.6	7.8	2.6	-	-	-	.1	10	80	70	-	26	23	-	146	33
2	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
2	19	62	7.5	11.0	7.9	2.4	-	-	-	.1	10	90	80	-	4	20	-	166	300
2	20	62	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-
2	26	62	2.4	13.2	8.0	2.2	-	-	-	.1	10	100	90	-	3	27	-	165	-
3	5	62	4.3	11.8	8.2	-	-	-	-	.1	10	110	90	-	5	-	-	-	100
3	12	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*33
3	19	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300
3	21	62	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-
4	2	62	12.7	9.9	7.8	2.2	-	-	-	-	-	-	-	-	-	-	-	-	*33
4	5	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.0	-	-
4	16	62	15.3	9.6	8.0	2.0	-	-	-	-	5	80	70	-	5	17	.0	-	-
4	23	62	16.8	9.7	7.8	2.3	-	-	-	-	10	70	60	-	9	15	.1	-	270
4	30	62	13.6	11.0	8.4	2.2	32	-	-	-	10	100	90	-	18	25	.0	-	130
5	7	62	14.6	10.9	8.2	1.5	-	-	-	-	5	120	80	-	8	25	.0	-	200
5	14	62	17.0	10.0	8.1	1.8	-	-	-	-	10	110	100	-	4	22	-	-	330
5	21	62	17.0	8.0	8.0	1.7	-	-	-	-	10	130	100	-	2	23	-	-	300
6	4	62	15.6	10.1	8.0	2.1	-	-	-	-	10	100	80	-	3	17	-	-	230
6	11	62	21.2	9.1	8.1	2.1	-	-	-	-	12	135	110	-	4	24	-	-	50
6	18	62	21.4	8.0	7.9	1.6	-	-	-	-	10	105	80	-	7	22	-	-	130
6	25	62	23.2	8.2	7.9	1.8	-	-	-	-	10	110	75	-	6	18	-	-	200
7	2	62	21.6	10.2	8.4	1.5	-	-	-	-	12	140	105	-	4	27	.0	-	440
7	9	62	24.5	10.7	8.3	2.2	-	-	-	-	12	150	110	-	7	28	-	-	70

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE WASHINGTON
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN YAKIMA RIVER
STATION LOCATION YAKIMA RIVER AT
RICHLAND, WASHINGTON 89

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	10	62	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-	-
7	16	62	23.7	10.4	8.7	3.1	-	-	-	-	10	170	120	-	4	32	-	-	200
7	23	62	26.4	8.7	7.6	3.4	-	-	-	-	10	165	130	-	4	33	.1	-	200
7	30	62	27.7	9.1	8.1	2.3	-	-	-	-	15	160	130	-	23	37	-	255	100
8	7	62	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
8	13	62	23.2	8.7	8.2	3.2	-	-	-	-	10	150	110	-	11	35	-	204	330
8	20	62	24.8	9.9	8.5	2.9	-	-	-	-	12	140	105	-	9	38	-	193	230
8	27	62	19.4	9.4	8.4	2.6	-	-	-	-	15	180	135	-	8	35	-	215	-
8	28	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
8	30	62	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-
9	10	62	18.0	8.6	8.0	1.9	-	-	-	.2	10	180	140	-	19	41	.0	218	670
9	17	62	18.6	9.0	7.8	2.0	-	-	-	.1	10	180	140	-	21	36	-	215	300
9	20	62	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-
9	22	62	-	-	-	-	27	-	-	-	-	-	-	-	-	-	-	-	-
9	24	62	19.8	8.5	8.1	2.3	-	-	-	.1	10	175	125	-	27	38	.0	221	1300

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Kiona, Washington
Operated by U.S. Geological Survey

STATE	Washington
MAJOR BASIN	Pacific Northwest
MINOR BASIN	Yakima River
STATION LOCATION	Yakima River at Richland, Washington

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	1.910	2.220	2.180	3.670	3.510	2.880	2.490	1.900	4.840	1.680	1.160	1.850
2	2.170	2.170	2.170	3.670	3.510	2.940	2.640	1.670	4.310	1.490	2.010	1.620
3	2.140	2.230	2.140	3.580	3.580	2.820	2.710	1.650	3.780	1.470	2.000	1.480
4	2.270	2.130	2.170	3.400	4.020	2.820	2.910	2.070	3.700	1.770	2.000	1.450
5	2.060	2.230	2.140	4.020	5.470	2.870	3.220	2.310	3.860	1.500	2.000	1.440
6	1.850	2.230	2.140	4.500	5.870	2.840	3.430	2.270	3.430	1.420	2.000	1.310
7	2.940	2.180	2.080	4.450	5.600	2.820	3.640	2.200	2.980	1.700	2.070	1.430
8	2.740	2.180	2.120	4.500	5.400	2.750	7.740	2.120	2.500	1.950	2.040	1.500
9	1.490	2.140	2.070	7.440	4.800	2.700	11.400	2.260	2.190	1.480	2.040	1.470
10	1.550	2.230	2.030	9.240	4.620	2.880	8.590	2.610	2.360	1.300	2.070	1.460
11	1.580	2.200	1.960	8.070	4.570	2.840	6.600	2.890	2.890	1.360	2.030	1.640
12	1.580	2.080	1.820	6.800	4.380	2.640	5.530	2.950	3.280	1.340	2.070	1.660
13	1.660	2.130	1.750	6.000	4.230	2.530	4.820	3.040	3.240	1.160	2.080	1.830
14	1.740	2.130	1.760	5.510	4.350	2.410	4.380	3.080	3.100	.941	2.080	1.880
15	2.450	2.150	1.830	5.060	4.600	2.370	4.330	2.980	3.610	1.030	2.080	1.940
16	2.350	2.140	1.860	4.750	4.840	2.350	4.820	2.680	3.480	1.190	2.070	2.000
17	2.220	2.140	2.120	4.450	4.650	2.370	5.440	2.540	3.480	1.230	2.070	2.000
18	2.100	2.080	1.690	4.210	4.620	2.440	4.720	2.310	4.380	1.160	2.070	1.840
19	2.200	2.030	1.770	3.930	4.380	2.500	4.330	2.220	4.960	1.130	2.070	1.780
20	2.910	2.040	1.800	3.220	4.210	2.610	4.090	2.480	4.820	1.410	2.070	1.740
21	2.810	2.040	2.130	2.570	4.140	2.440	4.450	3.130	4.550	1.560	2.070	1.670
22	2.810	2.000	2.750	2.850	3.940	2.400	4.060	2.890	4.110	1.450	1.600	1.670
23	2.740	1.920	2.350	2.710	3.750	2.500	3.430	2.450	3.740	1.400	1.620	1.700
24	2.610	2.150	2.240	2.680	3.670	2.630	3.010	2.570	3.460	1.450	1.550	1.630
25	2.450	2.350	2.430	3.180	3.460	2.490	2.750	3.860	3.310	1.500	1.620	1.630
26	2.490	2.320	3.190	3.460	3.260	2.750	2.800	4.350	3.240	1.500	1.620	1.630
27	2.410	2.140	3.690	3.900	3.130	3.060	2.600	5.190	3.140	1.340	1.550	1.630
28	2.390	2.140	3.590	4.520	2.870	2.950	2.440	5.200	2.590	1.150	1.690	1.660
29	2.390	2.190	3.430	3.930		2.700	2.700	5.260	2.170	1.150	1.740	1.790
30	2.340	2.180	3.260	3.780		2.480	2.280	5.190	1.950	1.200	1.760	2.010
31	2.270		3.320	3.430		2.440		4.890		1.210	1.860	

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MONTANA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN YELLOWSTONE RIVER
STATION LOCATION YELLOWSTONE RIVER NEAR
SIDNEY, MONTANA 55

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER														RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA						DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL				ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	MO.	DAY	µµc/g	±	µµc/g	±
10	2	61	10	26	-	-	-	-	-	-	69	22	19	16	88	27						
10	9	61	10	31	-	-	-	-	-	-	31	16	32	16	63	23						
10	16	61	10	30	-	-	-	-	-	-	52	21	13	16	65	26						
10	23	61	11	6	13	8	2	2	15	8	94	17	16	11	110	20						
10	30	61	11	11	-	-	-	-	-	-	21	14	1	15	22	20						
11	6	61	11	22	-	-	-	-	-	-	8	13	21	15	29	20						
11	13	61	11	27	-	-	-	-	-	-	47	16	48	16	95	23						
11	20	61	12	1	-	-	-	-	-	-	26	18	32	19	58	26						
11	27	61	12	8	1	2	6	4	7	4	15	14	15	15	30	21						
12	4	61	12	18	-	-	-	-	-	-	9	13	20	17	29	20						
12	11	61	12	22	-	-	-	-	-	-	0	11	16	16	16	19						
12	18	61	12	29	-	-	-	-	-	-	1	10	28	17	29	20						
12	26	61	1	9	2	2	8	5	10	5	6	16	50	22	56	27						
1	1	62	1	30	-	-	-	-	-	-	2	11	13	15	15	19						
1	8	62	1	23	-	-	-	-	-	-	83	13	35	15	118	20						
1	15	62	1	26	-	-	-	-	-	-	21	10	57	15	78	18						
1	22	62	2	1	1	2	6	5	7	5	18	17	35	21	53	27						
1	29	62	2	13	-	-	-	-	-	-	5	11	23	17	28	20						
2	5	62	2	16	-	-	-	-	-	-	35	12	39	11	74	16						
2	12	62	3	2	-	-	-	-	-	-	29	10	79	12	108	16						
2	19	62	3	6	-	-	-	-	-	-	94	23	48	16	142	28						
2	26	62	3	15	1	1	7	5	8	5	10	8	56	13	66	15						
3	5	62	3	20	-	-	-	-	-	-	14	11	45	16	59	19						
3	12	62	3	26	-	-	-	-	-	-	0	22	29	27	29	35						
3	19	62	3	30	-	-	-	-	-	-	8	9	22	12	30	15						
3	26	62	4	9	18	11	5	3	23	11	93	18	34	11	127	21						
4	2	62	4	19	-	-	-	-	-	-	88	25	22	16	110	30						
4	9	62	4	25	-	-	-	-	-	-	34	18	31	17	65	25						
4	16	62	4	30	-	-	-	-	-	-	59	31	35	28	94	42						
4	27	62	6	1	5	4	4	3	9	5	24	16	13	15	37	22						
4	30	62	6	4	-	-	-	-	-	-	247	65	17	16	264	67						
5	7	62	6	20	-	-	-	-	-	-	126	29	42	22	168	36						
5	14	62	6	25	-	-	-	-	-	-	246	36	40	5	286	36						
5	21	62	6	27	-	-	-	-	-	-	100	13	40	9	140	16						
5	28	62	10	16	43	141	6	4	49	141	1852	563	26	17	1878	564						
6	4	62	7	5	-	-	-	-	-	-	334	111	31	14	365	112						
6	11	62	7	10	-	-	-	-	-	-	149	74	8	7	157	74						
6	18	62	8	13	-	-	-	-	-	-	346	109	26	9	372	109						
6	25	62	7	23	16	23	1	2	17	23	184	96	20	8	204	96						
7	2	62	8	10	-	-	-	-	-	-	21	14	2	9	23	17						
7	9	62	8	6	-	-	-	-	-	-	27	8	75	12	102	14						

NATIONAL WATER QUALITY NETWORK

RADIOACTIVITY DETERMINATIONS

STATE MONTANA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN YELLOWSTONE RIVER
STATION LOCATION YELLOWSTONE RIVER NEAR
SIDNEY, MONTANA 55

DATE SAMPLE TAKEN			RADIOACTIVITY IN WATER															RADIOACTIVITY IN PLANKTON					
			DATE OF DETERMINATION		ALPHA						BETA							DATE OF DETERMINATION		GROSS ACTIVITY			
					SUSPENDED		DISSOLVED		TOTAL		SUSPENDED		DISSOLVED		TOTAL					ALPHA		BETA	
MO.	DAY	YR.	MO.	DAY	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±	µµc/l	±		MO.	DAY	µµc/g	±	µµc/g	±
7	16	62	8	3	-	-	-	-	-	-	117	61	43	13	160	62							
7	23	62	8	21	27	14	4	3	31	14	169	27	47	14	216	30							
7	30	62	8	23	-	-	-	-	-	-	75	19	25	14	100	24							
8	6	62	8	29	-	-	-	-	-	-	190	82	43	15	233	83							
8	13	62	8	30	-	-	-	-	-	-	76	64	24	14	100	66							
8	20	62	9	6	-	-	-	-	-	-	374	75	50	15	424	76							
8	27	62	9	17	5	3	4	4	9	5	21	20	7	23	28	30							
9	4	62	10	2	-	-	-	-	-	-	52	18	37	18	89	25							
9	10	62	10	9	-	-	-	-	-	-	37	16	28	16	65	23							
9	17	62	10	9	-	-	-	-	-	-	55	37	27	19	82	42							

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MONTANA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN YELLOWSTONE RIVER
STATION LOCATION YELLOWSTONE RIVER NEAR
SIDNEY, MONTANA 55

DATE OF SAMPLE			ALGAE (Number per milliliter)									INERT DIATOM SHELLS		MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes)																			
			TOTAL	BLUE-GREEN		GREEN		FLAGELLATED (Pigmented)		DIATOMS				1ST		2ND		3RD		4TH		5TH		6TH		7TH		8TH		9TH		10TH	
MONTH	DAY	YEAR		COCCOID	FILA-MENT-OUS	COCCOID	FILA-MENT-OUS	GREEN	OTHER	CENTRIC	PENNATE	CENTRIC	PENNATE	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL	GENUS	COUNT LEVEL
10	2	61	1000	0	20	40	0	0	0	40	890	0	230	92	1																		
10	16	61	1300	0	0	20	0	40	0	20	1240	0	390	92	2	87	1	97	1														
11	6	61	300	0	20	20	0	0	0	0	270	20	670																				
11	20	61	1200	0	0	20	0	0	0	40	1140	20	210	92	3	82	1																
12	4	61	200	0	0	0	0	0	0	0	250	0	40																				
12	18	61	300	0	0	0	0	0	0	0	270	0	0	91	1																		
1	1	62	2000	0	0	0	0	0	0	70	1900	0	0	92	3	87	1																
1	15	62	100	0	0	0	0	20	0	0	80	0	20																				
2	5	62	400	0	0	70	0	0	0	0	380	50	1070	92	1	82	1																
2	19	62	700	0	0	20	0	20	0	0	680	0	250	87	1																		
3	5	62	100	0	0	0	0	80	0	0	20	0	40																				
3	19	62	200	0	0	0	0	40	40	20	60	0	0																				
4	2	62	1900	0	0	0	0	90	0	0	1790	0	250	87	2	82	2	88	1	85	1	75	1										
4	16	62	2100	0	0	0	0	200	0	430	1450	20	660	92	3	71	2	82	1	51	1												
5	7	62	1700	0	0	0	0	20	0	950	760	40	1650	71	3	87	1	82	1	92	1												
5	21	62	6600	110	0	20	0	0	0	2150	4330	250	2910	71	4	92	3	82	3	87	3	88	2	81	1	85	1	79	1	97	1		
6	4	62	00	0	0	0	0	0	0	20	20	0	130																				
6	18	62	3400	0	0	0	0	0	0	130	3250	0	170	92	3	82	2	87	2														
7	2	62	1800	0	0	60	0	270	0	60	1410	20	170	92	2	82	1	57	1	88	1												
8	6	62	1200	0	40	0	0	60	0	170	910	0	210	92	1	82	1																
8	20	62	1500	0	0	170	60	40	0	290	910	40	80	38	1	82	1	68	1														
9	4	62	17700	250	40	2820	0	660	0	9150	4800	80	1160	68	6	38	4	87	3	79	3	92	3	51	2	25	2	69	2	4	1	71	1
9	17	62	3300	0	0	230	0	90	0	230	2740	50	770	81	2	85	2	92	2	82	2	79	1	97	1	73	1	87	1	71	1		

NATIONAL WATER QUALITY NETWORK

PLANKTON POPULATION

STATE MONTANA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN YELLOWSTONE RIVER
STATION LOCATION YELLOWSTONE RIVER NEAR
SIDNEY, MONTANA 055

DATE OF SAMPLE: MONTH	DAY	YEAR	DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes): 1ST SPECIES	1ST PERCENT	2ND SPECIES	2ND PERCENT	3RD SPECIES	3RD PERCENT	4TH SPECIES	4TH PERCENT	OTHER SPECIES PERCENT	FUNGI AND SHEATHED BACTERIA Number per ml.	MICROINVERTEBRATES: PROTOZOA (Identifiable) Number per ml.	ROTIFERS: NUMBER PER LITER	ROTIFERS 1ST GENUS	1ST COUNT LEVEL	2ND GENUS	2ND COUNT LEVEL	3RD GENUS	3RD COUNT LEVEL	4TH GENUS	4TH COUNT LEVEL	5TH GENUS	5TH COUNT LEVEL	CRUSTACEA: NUMBER PER LITER	CRUSTACEA 1ST GENUS	1ST COUNT LEVEL	2ND GENUS	2ND COUNT LEVEL	3RD GENUS	3RD COUNT LEVEL	NEMATODES (Identifiable) Number per liter	OTHER ANIMAL FORMS (Number per liter)
10	2	61	92	34	41	7	36	6	15	6	47	0	0	0											0							0	0
10	16	61	92	27	41	12	36	8	15	8	45	0	0	0											0							0	0
11	6	61	92	57	36	26	71	2	15	2	13	50	0	0											0							0	0
11	20	61	92	56	36	17	65	7	71	2	18	0	0	0											0							0	0
12	4	61	92	36	36	10	65	7	86	6	41	0	0	0											0							0	0
12	18	61	86	52	92	20	36	7	65	3	18	50	0	0											0							0	0
1	1	62	92	50	86	28	65	8	71	2	12	0	0	0											0							0	0
1	15	62	86	17	92	15	65	13	36	11	44	0	0	0											0							0	0
2	5	62	92	22	36	19	65	5	16	3	51	20	0	0											0							0	0
2	19	62										0	0	0											0							0	0
3	5	62	65	14	36	13	92	12	66	6	55	0	0	0											0							0	0
3	19	62	92	15	36	12	65	10	71	7	56	0	0	0											0							0	0
4	2	62										0	0	0											0							0	0
4	16	62	92	40	36	15	80	9	65	6	30	0	0	0											0							0	0
5	7	62	92	23	36	19	65	13	80	11	34	0	0	0											0							0	0
5	21	62	92	17	36	16	80	10	65	10	47	40	0	0											0							0	0
6	4	62	92	25	36	18	65	12	71	8	37	0	0	0											0							0	0
6	18	62	92	36	36	16	42	5	71	5	38	0	0	0											0							0	0
7	2	62	92	23	36	19	97	5	71	4	49	20	0	0											0							0	0
8	6	62	92	30	36	23	65	7	97	5	35	0	0	-											-							-	-
8	20	62	36	26	92	15	65	9	26	6	44	0	0	-											-							-	-
9	4	62	26	14	16	11	92	10	36	8	57	0	0	0											0							0	0
9	17	62	36	11	58	10	16	8	31	8	63	20	0	0											-							-	-

NATIONAL WATER QUALITY NETWORK

ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

STATE MONTANA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN YELLOWSTONE RIVER
STATION LOCATION YELLOWSTONE RIVER NEAR
SIDNEY, MONTANA

55

DATE OF SAMPLE					GALLONS FILTERED	EXTRACTABLES			CHLOROFORM EXTRACTABLES										
BEGINNING			END								NEUTRALS								
MONTH	DAY	YEAR	MONTH	DAY		TOTAL	CHLORO-FORM	ALCOHOL	ETHER INSOLUBLES	WATER SOLUBLES	TOTAL	ALIPHATICS	AROMATICS	OXYGEN-ATED COMPOUNDS	LOSS	WEAK ACIDS	STRONG ACIDS	BASES	LOSS
10	2	61	10	9	5000#	62	10	52	-	-	-	-	-	-	-	-	-	-	-
11	6	61	11	13	5000#	65	13	52	-	-	-	-	-	-	-	-	-	-	-
12	4	61	12	11	5000#	93	30	63	-	-	-	-	-	-	-	-	-	-	-
12	4	61		*	15000#	74	18	56	0	3	10	4	1	5	0	2	1	0	2
1	2	62	1	9	5000#	113	33	80	-	-	-	-	-	-	-	-	-	-	-
2	5	62	2	12	5000#	137	63	74	-	-	-	-	-	-	-	-	-	-	-
3	5	62	3	12	5000#	156	50	106	-	-	-	-	-	-	-	-	-	-	-
3	5	62		*	15000#	136	49	87	2	14	18	2	1	14	1	5	4	1	5
4	3	62	4	10	5000#	79	21	58	-	-	-	-	-	-	-	-	-	-	-
4	30	62	5	8	3000#	96	39	57	-	-	-	-	-	-	-	-	-	-	-
6	4	62	6	6	1500#	81	27	54	-	-	-	-	-	-	-	-	-	-	-
6	4	62		*	9500#	85	28	57	1	7	11	4	1	6	0	3	2	0	4
7	9	62	7	1	[illegible]0#	45	15	30	-	-	-	-	-	-	-	-	-	-	-
8	6	62	8	13	5000#	68	17	51	-	-	-	-	-	-	-	-	-	-	-
9	10	62	9	17	5000#	65	14	51	-	-	-	-	-	-	-	-	-	-	-
9	10	62		*	15000#	59	15	44	1	3	6	1	1	4	0	2	1	0	2

ESTIMATED

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MONTANA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN YELLOWSTONE RIVER
STATION LOCATION YELLOWSTONE RIVER NEAR
SIDNEY, MONTANA 55

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
10	2	61	9.3	11.0	8.2	-	-	-	-	-	74	156	280	-	1875	272	-	592	-
10	9	61	8.6	10.5	8.3	-	17	-	-	-	12	154	300	-	600	237	-	592	-
10	16	61	12.0	9.7	8.3	-	-	1.6	6.1	-	20	164	308	-	1300	275	-	666	-
10	23	61	5.8	12.0	8.1	-	-	1.5	6.2	-	11	150	256	-	1700	270	-	677	-
10	30	61	3.0	12.6	8.2	-	-	1.0	3.9	-	22	154	252	-	500	225	-	736	-
11	6	61	4.5	12.7	8.2	-	-	1.1	5.4	-	14	156	260	-	200	280	-	556	-
11	13	61	7.7	11.5	8.1	-	19	1.4	-	-	38	166	270	-	800	-	-	564	-
11	20	61	6.0	11.8	8.2	-	-	1.7	-	-	10	156	276	0	600	204	.1	582	-
11	27	61	4.0	-	8.2	-	-	-	-	-	8	154	255	-	240	193	.1	536	-
12	4	61	9.0	11.1	8.2	-	-	1.1	7.0	-	13	174	282	5	170	234	.1	624	-
12	11	61	6.0	-	8.2	-	11	-	-	-	6	190	308	-	45	234	.1	644	-
12	18	61	6.8	10.8	8.1	-	-	1.3	3.3	-	14	212	352	7	30	295	.0	750	-
12	26	61	3.4	10.4	7.9	-	-	1.3	-	-	12	240	396	5	55	340	-	812	-
1	2	62	6.0	-	8.0	-	-	-	-	-	6	184	292	-	55	225	-	584	-
1	8	62	4.0	11.0	7.9	-	7	1.3	3.5	-	28	162	264	6	70	193	-	-	-
1	15	62	5.5	10.5	7.9	-	-	1.2	-	-	4	180	290	6	40	183	-	554	-
1	22	62	6.0	10.5	8.0	-	-	1.2	-	-	10	214	364	5	45	246	-	754	-
1	29	62	6.0	9.7	7.9	-	-	.6	1.3	-	34	212	348	5	50	234	-	694	-
2	5	62	6.0	11.3	7.9	-	-	1.9	-	-	6	156	260	16	440	210	-	520	-
2	12	62	6.0	10.7	7.9	-	18	1.0	6.9	-	12	118	200	20	260	-	-	410	-
2	19	62	2.4	10.0	7.8	-	-	-	-	-	38	124	268	18	2500	204	-	604	-
2	26	62	5.7	12.8	8.0	-	-	2.3	6.4	-	28	130	288	18	60	214	-	602	-
3	5	62	6.0	11.0	7.9	-	-	2.7	5.9	-	32	174	356	16	55	234	-	688	-
3	12	62	6.0	11.7	8.1	-	15	1.2	3.7	-	38	218	394	-	50	316	-	804	-
3	19	62	10.0	11.0	8.0	-	-	1.6	2.7	-	12	154	274	-	85	193	-	574	-
3	26	62	3.2	11.4	8.0	-	-	-	-	-	23	104	216	18	1800	195	-	486	-
4	2	62	4.0	13.9	8.1	-	-	-	-	-	38	152	278	-	2700	234	-	606	-
4	9	62	7.3	14.7	3.3	-	18	1.4	-	-	18	176	314	6	750	290	-	-	-
4	16	62	11.5	10.0	8.3	-	-	2.0	6.5	-	20	184	338	10	700	280	.0	760	-
4	23	62	15.0	8.9	8.3	-	-	1.7	-	-	14	156	268	-	850	204	-	-	-
4	30	62	12.8	9.4	8.1	-	-	-	-	-	11	112	180	20	2250	125	-	374	-
5	7	62	14.5	-	8.1	-	0	-	-	-	3	118	200	-	1125	103	-	410	-
5	14	62	14.5	8.2	8.0	-	-	3.6	6.2	-	-	102	128	32	4500	76	-	320	-
5	21	62	15.7	8.8	8.1	-	-	2.1	8.3	-	-	96	150	16	450	-	-	300	-
5	28	62	12.0	9.2	7.9	-	-	2.2	-	-	-	98	254	32	14000	163	-	552	-
6	4	62	18.6	-	7.9	-	-	-	-	-	-	102	186	-	4500	123	-	370	-
6	11	62	21.8	-	7.9	-	-	-	-	-	-	90	164	-	2500	69	-	344	-
6	18	62	19.2	-	7.8	-	-	-	-	-	-	74	130	-	3000	69	-	258	-
6	25	62	21.0	7.4	7.8	-	-	3.4	-	-	-	66	136	14	3000	24	-	278	-

NATIONAL WATER QUALITY NETWORK

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MONTANA
MAJOR BASIN MISSOURI RIVER
MINOR BASIN YELLOWSTONE RIVER
STATION LOCATION YELLOWSTONE RIVER NEAR
SIDNEY, MONTANA

DATE OF SAMPLE			TEMP. (Degrees Centigrade)	DISSOLVED OXYGEN mg/l	pH	B.O.D. mg/l	C.O.D. mg/l	CHLORINE DEMAND		AMMONIA-NITROGEN mg/l	CHLORIDES mg/l	ALKALINITY mg/l	HARDNESS mg/l	COLOR (scale units)	TURBIDITY (scale units)	SULFATES mg/l	PHOSPHATES mg/l	TOTAL DISSOLVED SOLIDS mg/l	COLIFORMS per 100 ml.
MONTH	DAY	YEAR						1-HOUR mg/l	24-HOUR mg/l										
7	2	62	22.9	-	8.1	-	-	-	-	-	5	72	102	-	1000	33	.0	186	-
7	9	62	22.7	7.0	8.1	-	-	2.2	11.4	-	-	74	130	12	1300	50	-	260	-
7	16	62	20.0	-	8.2	-	94	-	-	-	16	90	144	43	13000	32	-	-	-
7	23	62	23.5	-	8.2	-	-	-	-	-	18	104	176	14	2000	-	-	-	-
7	30	62	21.8	8.0	8.4	-	-	1.6	6.6	-	8	110	192	12	700	76	.0	398	-
8	6	62	22.7	-	8.3	-	-	-	-	-	15	124	228	-	2300	114	-	484	-
8	13	62	22.9	-	8.2	-	17	-	-	-	-	122	206	-	850	123	-	448	-
8	20	62	22.6	-	8.2	-	-	-	-	-	-	140	238	-	1200	142	-	496	-
8	27	62	21.3	8.8	8.4	-	-	1.6	6.8	-	-	124	224	7	200	134	-	512	-
9	3	62	15.8	-	8.4	-	-	-	-	-	-	142	254	-	400	174	-	466	-
9	10	62	15.2	-	8.6	-	-	-	-	-	13	154	254	-	225	163	.0	560	-
9	17	62	15.8	18.9	8.5	-	-	1.2	4.4	-	11	160	260	14	275	153	.0	734	-

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Sidney, Montana
Operated by U.S. Geological Survey

STATE Montana
MAJOR BASIN Missouri River
MINOR BASIN Yellowstone River
STATION LOCATION Yellowstone River near Sidney, Montana

Day	October	November	December	January	February	March	April	May	June	July	August	September
1	8.370	8.800	6.900	6.400	5.300	5.400	14.000	19.400	30.400	52.800	14.100	6.580
2	8.310	8.370	6.900	6.500	6.400	4.600	13.000	17.800	31.700	48.100	13.300	6.840
3	8.420	7.960	6.800	6.500	7.200	4.000	12.000	16.100	32.600	43.200	12.600	7.540
4	8.420	7.800	6.600	6.600	8.400	3.400	12.000	14.400	30.100	39.900	13.800	7.710
5	8.450	8.000	6.200	6.600	9.200	3.500	11.200	12.900	38.800	37.000	13.800	7.510
6	8.080	8.300	6.000	6.600	9.800	3.700	10.600	11.600	44.600	36.500	13.500	7.400
7	7.850	8.400	5.600	6.600	10.000	3.900	10.500	10.500	47.500	33.000	13.200	7.350
8	7.680	8.400	5.000	6.500	11.000	4.500	9.540	9.990	45.400	30.300	12.500	7.460
9	7.850	8.300	4.600	6.400	11.000	5.200	9.010	12.300	36.600	27.100	11.800	7.680
10	8.510	8.250	4.000	6.400	10.000	6.000	8.740	14.100	31.100	26.600	12.000	7.960
11	9.070	8.340	3.000	6.400	9.800	7.000	8.220	14.900	28.000	25.800	11.300	8.540
12	9.070	8.510	2.000	6.300	10.000	8.000	8.250	16.700	26.900	23.000	10.300	8.920
13	9.010	8.310	1.600	6.200	11.000	8.600	9.070	19.900	28.600	21.500	10.300	9.380
14	10.900	8.480	1.100	5.000	12.000	9.000	8.770	23.200	37.600	23.600	12.300	9.670
15	10.800	8.570	.700	4.000	13.000	9.400	8.800	24.800	50.300	32.200	12.200	9.480
16	9.640	8.600	1.000	2.900	16.000	9.600	8.740	25.000	58.700	36.800	11.100	9.290
17	9.190	8.400	1.200	2.600	20.000	9.900	8.450	23.000	57.000	43.900	10.100	9.320
18	8.980	8.020	1.000	2.600	30.000	10.000	8.800	21.100	59.000	37.000	9.320	9.450
19	8.920	8.280	1.000	2.700	18.000	11.000	9.510	19.800	69.700	38.300	8.370	9.260
20	8.720	7.820	2.000	2.900	13.000	12.000	10.600	18.300	73.200	30.700	7.650	8.720
21	8.920	6.280	3.800	3.100	11.000	16.000	11.300	17.600	69.900	24.200	7.320	8.400
22	9.220	5.780	6.000	3.300	9.700	25.000	11.700	17.700	63.500	21.200	6.980	8.050
23	9.130	6.300	6.600	3.600	9.200	28.000	12.600	21.200	61.600	19.400	7.040	7.910
24	8.890	7.010	6.800	3.700	8.600	27.000	15.100	20.800	57.800	17.600	6.660	7.710
25	8.890	8.450	6.700	3.800	8.000	24.000	17.000	20.200	54.200	16.000	6.170	7.850
26	9.100	8.800	6.600	4.000	7.200	21.000	16.900	23.700	52.500	14.700	6.360	8.720
27	8.800	7.000	6.600	4.200	6.600	20.000	16.500	29.300	53.800	13.800	6.790	9.010
28	8.250	6.400	6.500	4.300	6.000	18.000	17.600	27.100	54.200	13.100	7.210	8.860
29	8.250	6.600	6.400	4.400		17.000	19.900	37.400	53.900	12.800	6.870	9.220
30	8.220	6.800	6.400	4.600		16.000	20.500	42.200	53.800	13.700	6.440	9.190
31	8.420		6.400	4.800		15.000		36.600		14.300	6.360	

Strontium 90

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Strontium 90

Strontium 90 Activity, μμc/liter—1961–1962

Sampling Point	October–December	January–March	April–June	July–September
ALLEGHENY RIVER				
at Pittsburgh, Pa.	0.6	1.7	1.2	2.1
ANIMAS RIVER				
at Cedar Hill, N. Mex.	.9	.8	1.0	.4
APALACHICOLA RIVER				
at Chattahoochee, Fla.	.5	.9	.9	.4
ARKANSAS RIVER				
at Pendleton Ferry, Ark.	.5	1.3	—	—
near Ponca City, Okla.	.6	1.3	3.0	4.8
at Coolidge, Kans.	1.0	.6	3.9	2.6
BEAR RIVER				
above Preston, Idaho	—	—	—	1.3
BIG HORN RIVER				
at Hardin, Mont.	—	1.5	6.4	3.7
BIG SIOUX RIVER				
below Sioux Falls, S. Dak.	1.2	2.0	5.9	5.4
CHATTAHOOCHE RIVER				
at Columbus, Ga.	.1	.6	—	.8
at Lanett, Ala.	—	—	—	1.5
at Atlanta, Ga.	.3	.5	.8	.7
CHENA SLOUGH				
at Fairbanks, Alaska	—	—	1.4	.4
CLEARWATER RIVER				
at Lewiston, Idaho	.3	.5	.4	.5
CLINCH RIVER				
above Kingston, Tenn.	—	—	1.7	12.6
at Clinton, Tenn.	—	—	—	1.3
COLORADO RIVER				
at Yuma, Ariz.	0.7	0.6	1.0	1.2
above Parker Dam, Ariz.-Calif.	1.5	1.0	1.7	1.7
near Boulder City, Nev.	1.8	1.3	2.0	1.7
at Page, Ariz.	1.9	1.5	4.9	1.5
at Loma, Colo.	.8	1.2	1.5	.8
COLUMBIA RIVER				
at Clatskanie, Oreg.	.6	.7	.7	.6
at Bonneville, Oreg.	.8	1.1	1.6	.4
at McNary Dam, Oreg.	.6	.9	.7	1.4
at Pasco, Wash.	.7	1.1	.8	1.8
at Wenatachee, Wash.	.7	.9	.8	1.2
at Northport, Wash.	—	—	.6	1.3
CONNECTICUT RIVER				
at Enfield Dam, Conn.	—	—	—	1.4
below Northfield, Mass.	.4	.6	1.0	1.3
at Wilder, Vt.	3.7	.8	.8	1.4
CUMBERLAND RIVER				
at Clarksville, Tenn.	.9	—	—	—
DELAWARE RIVER				
at Philadelphia, Pa.	—	.7	1.3	1.6
at Trenton, N.J.	.7	1.0	1.6	1.5
at Martins Creek, Pa.	.5	.7	1.1	.5
ESCAMBIA RIVER				
at Century, Fla.	.5	.4	1.1	1.0

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Strontium 90—Continued

Strontium 90 Activity, $\mu\mu c$/liter—1961–1962

Sampling Point	October–December	January–March	April–June	July–September
GREAT LAKES				
Lake Erie at Buffalo, N.Y.	0.8	1.0	1.1	1.3
Lake Huron, Detroit River at Detroit, Mich.	.4	1.1	1.2	1.5
Lake Huron, St. Clair River at Port Huron, Mich.	.8	.8	1.3	1.0
Lake Michigan at Gary, Ind.	.1	.9	.7	1.0
Lake Michigan at Milwaukee, Wis.	.8	.5	.7	2.1
Lake Superior, at St. Mary's River at Sault Ste. Marie, Mich.	.5	.5	.6	.9
Lake Superior at Duluth, Minn.	.1	.8	.5	.7
GREEN RIVER				
at Dutch John, Utah	—	—	—	1.9
HUDSON RIVER				
below Poughkeepsie, N.Y.	2.5	1.1	1.7	1.7
ILLINOIS RIVER				
near Grafton, Ill.	.6	2.5	2.4	1.4
at Peoria, Ill.	.7	1.0	1.7	2.0
KANAWHA RIVER				
at Winfield Dam, W. Va.	.5	.4	.8	1.3
KLAMATH RIVER				
near Keno, Oreg.	1.2	1.1	1.3	2.8
LITTLE MIAMI RIVER				
at Cincinnati, Ohio	.6	1.3	2.9	.9
MERRIMACK RIVER				
above Lowell, Mass.	—	—	—	—
MISSISSIPPI RIVER				
at New Orleans, La.	0.7	1.4	2.3	2.1
at Vicksburg, Miss.	.7	2.0	3.1	2.0
at Delta, La.	1.8	1.0	1.9	1.1
at West Memphis, Ark.	1.1	1.5	2.7	2.4
at Cape Girardeau, Mo.	1.0	1.4	2.8	3.1
at East St. Louis, Ill.	.9	1.2	2.2	2.7
at Burlington, Iowa	1.9	1.0	2.0	2.1
at Dubuque, Iowa	.8	.7	2.9	—
below St. Paul, Minn.	.6	1.3	3.9	4.7
MISSOURI RIVER				
at St. Louis, Mo.	2.1	1.3	2.7	2.5
at Missouri City, Mo.	—	1.5	2.8	2.2
at Kansas City, Kans.	.9	.5	1.8	3.4
at St. Joseph, Mo.	.5	1.1	3.0	5.7
at Omaha, Nebr.	.7	1.0	4.2	3.8
at Yankton, S. Dak.	2.5	.7	2.3	2.3
at Bismarck, N. Dak.	1.1	1.4	1.9	1.4
at Williston, N. Dak.	1.2	1.4	1.1	3.0
MONONGAHELA RIVER				
at Pittsburgh, Pa.	1.3	.7	.9	1.8
NORTH PLATTE RIVER				
above Henry, Nebr.	1.3	.5	2.2	2.1

Strontium 90—Continued

Strontium 90 Activity, μμc/liter—1961–1962

Sampling Point	October–December	January–March	April–June	July–September
OHIO RIVER				
at Cairo, Ill.	—	1.4	2.0	1.4
at Evansville, Ind.	0.9	1.0	1.4	1.3
at Louisville, Ky.	.7	1.3	1.3	3.3
at Cincinnati, Ohio	.6	1.2	1.9	1.5
at Huntington, W. Va.	1.0	.6	1.9	1.5
below Addison, Ohio	—	—	—	1.3
at East Liverpool, Ohio	—	1.2	1.5	—
OUACHITA RIVER				
at Bastrop, La.	.7	2.0	1.6	1.0
PEND OREILLE RIVER				
at Albeni Falls Dam, Idaho	—	—	1.6	.5
PLATTE RIVER				
above Plattsmouth, Nebr.	.4	2.2	6.0	4.1
POTOMAC RIVER				
at Great Falls, Md.	.6	1.1	2.2	1.2
at Williamsport, Md.	.9	.5	.9	1.2
RAINY RIVER				
at Baudette, Minn.	—	1.4	1.4	1.7
at International Falls, Minn.	.3	1.4	2.4	1.4
RARITAN RIVER				
at Perth Amboy, N.J.	—	—	—	—
RED RIVER (North)				
at Grand Forks, N. Dak.	1.1	—	—	—
RED RIVER (South)				
at Alexandria, La.	2.7	1.1	2.5	2.0
at Bossier City, La.	—	—	—	2.2
at Index, Ark.	1.7	2.1	6.1	—
at Denison, Tex.	2.2	2.2	2.2	1.1
RIO GRANDE				
at Brownsville, Tex.	.6	.9	1.2	.7
at Laredo, Tex.	.6	.4	2.0	1.8
at El Paso, Tex.	—	.5	1.2	1.7
below Alamosa, Colo.	—	.6	1.1	.5
ROANOKE RIVER				
at John H. Kerr Reservoir and Dam, Va.	.6	.6	2.5	1.8
SABINE RIVER				
near Ruliff, Tex.	.7	1.3	1.7	1.0
SACRAMENTO RIVER				
at Greens Landing above Courtland, Calif.	—	—	.9	.8
ST. LAWRENCE RIVER				
at Massena, N.Y.	1.6	.8	1.2	.3
SAN JOAQUIN RIVER				
near Vernalis, Calif.	—	—	—	.7
SAN JUAN RIVER				
at Shiprock, N. Mex.	1.3	1.9	1.0	1.0

Strontium 90—Continued

Strontium 90 Activity, μμc/liter—1961–1962

Sampling Point	October–December	January–March	April–June	July–September
SAVANNAH RIVER				
at Port Wentworth, Ga.	0.7	0.9	1.9	2.2
at North Augusta, S.C.	—	.8	1.0	.8
SCHUYLKILL RIVER				
at Philadelphia, Pa.	—	.6	1.5	1.8
SHENANDOAH RIVER				
at Berryville, Va.	.2	.4	.9	.4
SHIP CREEK				
at Anchorage, Alaska	—	—	.2	—
SNAKE RIVER				
at Ice Harbor Dam, Wash.	—	—	.9	1.1
at Wawawai, Wash.	.2	.9	.6	.9
at Payette, Idaho	2.5	.3	.6	1.1
SOUTH PLATTE RIVER				
at Julesburg, Colo.	1.2	.8	1.7	2.2
SPOKANE RIVER				
at Post Falls Dam, Idaho	—	—	.7	.9
SUSQUEHANNA RIVER				
at Conowingo, Md.	.9	.5	1.0	2.1
at Sayre, Pa.	.2	.9	1.2	1.0
TENNESSEE RIVER				
at Pickwick Landing, Tenn.	0.4	1.3	1.7	1.1
at Bridgeport, Ala.	1.5	2.0	2.0	.6
at Chattanooga, Tenn.	.5	.6	1.6	1.2
at Lenoir City, Tenn.	—	1.2	1.1	2.8
TOMBIGBEE RIVER				
below Columbus, Miss.	.2	.9	1.4	1.6
TRUCKEE RIVER				
Calif.-Nev. border at Farad, Calif.	.1	.8	.9	.7
VERDIGRIS RIVER				
at Nowata, Okla.	—	—	3.1	2.3
WABASH RIVER				
at New Harmony, Ind.	—	1.3	4.7	2.0
WILLAMETTE RIVER				
at Portland, Oreg.	—	—	—	.5
YAKIMA RIVER				
at Richland, Wash.	.6	.6	.4	.3
YELLOWSTONE RIVER				
near Sidney, Mont.	1.2	1.3	3.0	1.5

Trace Elements

TRACE ELEMENTS

NATIONAL WATER QUALITY NETWORK

1960 - 1961

STATION	DATE		CONCENTRATION —— MILLIGRAMS PER LITER																					
			ANALYSIS BY WET OR FLAME METHOD					*ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD*																
	FROM	TO	B	F	K	Na	Se	Cd	Bc	Be	Pb	Cr	Sn	Sb	Mn	Fe	Ni	Bi	Mo	V	Cu	Zn	Co	Ag
ALLEGHENY RIVER at Pittsburgh, Pa.	12-12-61 3-21-62	3-20-62 8-22-62	.12 .02	- .35	- 3.3	- 13.	.01* .01*	.005* .006*	.03 .05	.00008* .001*	.008* .01*	.002* .002*	.003* .006*	.02* .02*	.03 .006*	.08 .006	.003* .006	.008* .01*	.003* .006*	.003* .006*	.006 .005	.8* .06*	.003* .006*	.00008* .0001*
ANIMAS RIVER at Cedar Hill, N. Mexico	12-12-61 5-14-62	3-20-62 9-18-62	.18 .03	- .51	- 3.6	- 19.	.01* .01*	.01* .007*	.04 .04	.0002* .002*	.02* .02	.004* .003*	.008* .007*	.04* .03*	.02* .007*	.01 .007	.008* .007*	.02* .02*	.008 .007	.04 .03	.008 .01	2.* .07*	.008* .007*	.0002* .0002*
APALACHICOLA RIVER at Chattahoochee, Fla.	12-12-61 4-12-62	3-20-62 9-18-62	 .01*	.13 .14	1.4 1.0	7. 3.	.01* .01*	.002* .002*	.002* .02	.00004* .0004*	.004* .004	.0008* .0008*	.002* .002*	.008* .008*	.02 .002*	.96 .004	.006 .002*	.004* .004*	.002* .002*	.002* .002*	.02 .004	.4* .02*	.002* .002*	.00004* .00004*
ARKANSAS RIVER at Pendleton Ferry, Ark.	12-12-61	3-20-62	.12	.00	2.5	58.	.01*	.01*	.02	.0002*	.02*	.003*	.006*	.03*	.01*	.2	.006*	.02*	.006*	.006*	.001	2.*	.006*	.0002*
near Ponca City, Okla.	12-12-61 4-30-62	3-20-62 9-17-62	.12 .10	.44 .51	4.1 8.1	155. 155.	.01* .01*	.03* .02*	.04 .2	.0004* .004*	.04* .04*	.009* .01	.02* .02*	.09* .07*	.04* .02*	.02* .02	.02* .02*	.04* .04*	.02* .02	.02* .02	.003* .007*	4.* .2*	.02* .02*	.0004* .0004*
at Coolidge, Kansas	12-12-61 5-1-62	3-20-62 10-8-62	.74 .60	.78 .56	10.2 15.0	525. 400.	.01* .01*	.1* .07*	.08* .07	.002* .014*	.2* .1*	.04* .03*	.08* .07*	.4* .3*	.2* .07*	.08* .07	.08* .07*	.2* .2*	.08* .07*	.08* .07*	.01* .03	20.* .7*	.08* .07*	.008* .001*
BEAR RIVER above Preston, Idaho	8-20-62	10-1-62	.14	.45	9.1	45.	.01*	.01*	.03	.003*	.05	.005*	.01*	.01*	.01*	.01	.01*	.03*	.01*	.01*	.01	.3	.01*	.0003
BIG HORN RIVER at Hardin, Montana	12-12-61 3-19-62	3-20-62 8-20-62	.14 .14	.50 .40	3.7 5.5	75. 82.	.01* .01*	.02* .01*	.01* .04	.0003* .003*	.03* .03*	.006* .006*	.01* .01*	.06* .06*	.02* .01*	.16 .03	.01* .01*	.03* .03*	.01* .01*	.01* .01*	.01 .003	3.* .1*	.01* .01*	.0003* .0003*
BIG SIOUX RIVER below Sioux Falls, S. D.	12-12-61 3-23-62	3-20-62 8-15-62	.19 .12	.55 .25	15.4 8.9	330. 25.	.01* .01*	.03* .01*	.02* .03*	.0006* .002*	.06* .02*	.01* .005*	.02* .01*	.1* .05*	.04* .01*	.03 .01	.02* .01*	.06* .02*	.02* .01*	.02* .01*	.008 .01	6.* .1*	.02* .01*	.0006* .0002*
CHATTAHOOCHEE RIVER at Columbus, Georgia	12-12-61 5-16-62	3-20-62 9-24-62	.08 .01*	.13 .08	1.6 1.6	5. 3.	.01* .01*	.001* .002*	.0008 .007	.00002* .0003*	.002* .003	.003 .001	.0008* .002*	.004* .007*	.004 .002*	.02 .01	.0008* .002*	.002* .003*	.0008* .002*	.0008* .002*	.004 .007	.2* .03	.0008 .002*	.00008 .00003*
at Lanett, Alabama	7-30-62	9-17-62	-	-	-	-	-	.001*	.006	.0003*	.003*	.002	.001*	.006*	.001*	.02	.001*	.003*	.001*	.001*	.003	.01	.001*	.00003*
at Atlanta, Georgia	12-13-61 3-28-62	3-11-62 8-29-62	.04 .02*	.13 .01*	1.6 1.3	3. 2.	.01* .01*	.0009* .0004*	.0006 .003	.00002* .0001*	.002* .001*	.0009 .0004	.0006* .0004*	.003* .002*	.001* .0008	.01 .004	.0006* .0004*	.002* .001*	.0006* .0004*	.0006* .0004*	.002 .001	.2* .004	.0006 .0004	.00002* .00002
CHENA SLOUGH at Fairbanks, Alaska	6-5-62	10-8-62	.06	.14	1.1	3.	.01*	.002*	.004	.0004*	.004	.0009*	.002*	.009*	.002*	.02	.002*	.004*	.002*	.002*	.002	.02*	.002*	.00004*
CLEARWATER RIVER at Lewiston, Idaho	12-12-61 5-1-62	3-20-62 9-4-62	.03 .05	.18 .20	1.6 .6	6. 4.	.01* .01*	.002* .001*	.03 .003	.00003* .0003*	.003 .003*	.0006* .0005*	.001* .001*	.006* .005*	.003 .001*	.03 .03	.001* .001*	.003* .003*	.003 .001*	.001* .001*	.002 .003	.3* .01	.001* .001*	.00003* .00003*
CLINCH RIVER at Clinton, Tennessee	7-2-62	9-23-62	.05	.14	1.1	3.	.01*	.003*	.02	.0006*	.006*	.001*	.003*	.01*	.003*	.06	.004	.006*	.003*	.003*	.03	.03	.003*	.00006*
above Kingston, Tenn.	3-2-62	9-4-62	.03	.08	1.3	3.	.01*	.003*	.008	.0006*	.006*	.002	.003*	.01*	.003*	.003	.003*	.006*	.003*	.003*	.003	.03*	.003*	.002

* ACTUAL VALUE IS LESS THAN THE AMOUNT SHOWN. REPORTED RESULT INDICATES LIMIT OF SENSITIVITY AT WHICH TEST WAS PERFORMED. SEE TEXT FOR EXPLANATION.

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TRACE ELEMENTS

NATIONAL WATER QUALITY NETWORK

1960 - 1961

STATION	DATE		CONCENTRATION —— MILLIGRAMS PER LITER																					
	FROM	TO	ANALYSIS BY WET OR FLAME METHOD					ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD																
			B	F	K	Na	Se	Cd	Ba	Be	Pb	Cr	Sn	Sb	Mn	Fe	Ni	Bi	Mo	V	Cu	Zn	Co	Ag
COLORADO RIVER																								
at Yuma, Arizona	12-12-61	2-20-62	.73	.74	8.6	696.	.01*	.09*	.06*	.002*	.2*	.03*	.06*	.3*	.05*	.06*	.06*	.2*	.06*	.06*	.009*	20.*	.06*	.002*
	3-2-62	9-4-62	.73	.51	15.0	500.	.01*	.06*	.06	.01*	.1*	.02*	.06*	.2*	.06*	.06*	.06*	.1*	.06*	.06*	.01	.6*	.06*	.001*
above Parker Dam, Arizona-California	12-12-61	3-20-62	.17	.50	5.0	101.	.01*	.02*	.05	.0004*	.04*	.007*	.01*	.07*	.03*	.02	.01*	.04*	.02	.01*	.02	4.*	.01*	.0004*
	5-7-62	9-17-62	.17	.40	6.5	116.	.01*	.02*	.11	.004*	.04*	.007*	.02*	.07*	.02*	.3	.02*	.04*	.02	.02	.03	.2*	.02*	.0004*
near Boulder City, Nevada	12-12-61	3-20-62	.13	.46	4.8	99.	.01*	.02*	.04	.0004*	.04*	.007*	.01*	.07*	.03*	.01*	.01*	.04*	.02	.01*	.002	4.*	.01*	.0004*
	4-24-62	6-12-62	.14	.35	6.6	110.	.01*	.02*	.05	.004*	.04*	.007*	.02*	.07*	.02*	.02*	.02*	.04*	.02	.02*	.02	.2*	.02*	.0004*
at Page, Arizona	12-12-61	3-20-62	.14	.46	5.0	105.	.01*	.02*	.02	.0004*	.04*	.008*	.02*	.08*	.03*	.02	.02*	.04*	.03	.02*	.002	4.*	.02*	.0004*
	1-23-62	9-17-62	.14	.35	6.1	112.	.01*	.02*	.15	.004*	.04*	.008*	.02*	.06*	.02*	.04	.02*	.04*	.08	.02*	.008	.2*	.02*	.0004
at Loma, Colorado	12-12-61	3-20-62	.10	.50	4.1	119.	.01*	.02*	.02	.0004*	.04*	.02	.02*	.08*	.03*	.02	.02*	.04*	.04	.02*	.002*	4.*	.02*	.0004*
	3-21-62	9-24-62	.06	.35	5.4	100.	.01*	.02*	.04	.004*	.04*	.007*	.02*	.07*	.02*	.04	.02*	.04*	.04	.02*	.007	.2*	.02*	.004
COLUMBIA RIVER																								
at Clatskanie, Oregon	12-12-61	3-20-62	.06	.36	1.9	7.	.01*	.002*	.004	.00004*	.004*	.003	.001*	.007*	.003*	.06	.001*	.004*	.001*	.001*	.003	.4*	.001*	.00004*
	5-7-62	9-17-62	.08	.20	1.4	6.	.01*	.002*	.02	.0005*	.005*	.004	.002*	.009*	.002*	.09	.002	.005*	.002*	.005	.006	.08*	.002*	.00005*
at Bonneville, Oregon	12-12-61	3-20-62	.03	.32	2.0	10.	.01*	.003*	.009	.00005*	.03	.002	.002*	.01*	.004*	.03	.002*	.005*	.002	.002*	.003	.5*	.002*	.00005*
	4-2-62	3-20-62	.06	.25	1.4	6.	.01*	.002*	.02	.0005*	.005*	.002	.002*	.01*	.002*	.07	.005	.005*	.002*	.002	.008	.02*	.002*	.0003
at McNary Dam, Oregon	12-12-61	3-19-62	.08	.27	2.2	10.	.01*	.004*	.02	.00006*	.006*	.01	.002*	.01*	.07	.05	.002*	.006*	.04	.002*	.005	.6*	.002*	.00006*
	3-19-62	9-24-62	.03	.14	1.5	6.	.01*	.003*	.03	.0005*	.005*	.004	.003*	.01*	.003*	.005	.003*	.005*	.003	.003	.005	.03*	.003*	.00005*
at Pasco, Washington	12-18-61	3-19-62	.03	.27	1.6	3.	.01*	.003*	.03	.00004*	.004*	.009	.002*	.009*	.004*	.003	.002*	.004*	.003	.002*	.004	.4*	.002*	.00005*
	4-16-62	9-17-62	.02	.14	1.1	3.	.01*	.004*	.01	.0007*	.007*	.003	.004*	.01*	.004*	.007	.004	.007*	.004*	.004*	.01	.04*	.004*	.00007*
at Wenatchee, Washington	12-26-61	3-10-62	.04	.18	1.6	3.	.01*	.002*	.04	.00004*	.004*	.0008*	.002*	.008*	.003	.02	.002	.004*	.002	.002*	.003	.4*	.002*	.00004*
	3-20-62	9-4-62	.02*	.20	1.3	4.	.01*	.003*	.02	.0005*	.005*	.001	.003*	.01*	.003*	.003	.003*	.005*	.003*	.003*	.002	.03*	.003*	.00005*
at Northport, Washington	5-17-62	9-24-62	.08	.08	.8	2.	.01*	.002*	.03	.0004*	.004*	.0008*	.002*	.008*	.002*	.004	.004	.004*	.002*	.002*	.006	.02	.002*	.00004*
CONNECTICUT RIVER																								
at Enfield Dam, Conn.	7-16-62	9-15-62	.05	.14	1.8	8.	.01*	.002*	.002	.0004*	.004*	.0007*	.002*	.007*	.002*	.007	.002*	.004*	.002*	.002*	.007	.02*	.002*	.00004*
below Northfield, Mass.	12-12-61	3-20-62	.03	.13	1.9	6.	.01*	.002*	.006	.00003*	.003*	.0007*	.001*	.007*	.003*	.01	.001*	.003*	.001*	.001*	.006	.3*	.001*	.00003*
	4-23-62	8-13-62	.02*	.08	1.6	6.	.01*	.001*	.003	.0003*	.003*	.0006	.001*	.006*	.003	.01	.001*	.003*	.001*	.001*	.003	.03	.001*	.002
at Wilder, Vermont	12-12-61	3-20-62	.04	.18	1.9	6.	.01*	.002*	.006	.00004*	.007	.003	.001*	.007*	.003*	.02	.001*	.004*	.001*	.001*	.04	.4*	.001*	.00004*
	5-18-62	9-21-62	.01*	.14	1.1	22.	.01*	.002*	.003	.0003*	.003	.002	.002*	.006*	.002*	.02	.002*	.003*	.002*	.002*	.006	.02*	.002*	.0003
CUMBERLAND RIVER																								
at Clarksville, Tenn.	12-19-61	2-6-62	.06	.14	1.9	4.	.01*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DELAWARE RIVER																								
at Philadelphia, Pa.	2-26-62	3-10-62	.04	-	-	-	.01*	.003*	.008	.00005*	.005*	.001*	.002*	.01*	.004	.04	.002*	.005*	.002*	.002*	.03	.5*	.002*	.0005
	3-12-62	9-10-62	.05	.30	2.4	8.	.01*	.004*	.008	.0008*	.008	.002*	.004*	.02*	.004*	.004	.004*	.008*	.004*	.004*	.03	.04*	.004*	.00008*
at Trenton, New Jersey	12-12-61	3-20-62	.04	.13	2.5	4.	.01*	.003*	.03	.00005*	.005*	.001*	.002*	.01*	.004*	.03	.02	.005*	.002*	.002*	.01	.5*	.002*	.001
	1-2-62	9-17-62	.02	.30	1.8	3.	.01*	.003*	.008	.0005*	.005*	.001	.003*	.01*	.003*	.003*	.003*	.005*	.003*	.003*	.004	.03*	.003*	.00005*
at Martins Creek, Pa.	12-20-61	3-21-62	.03	.13	1.9	6.	.01*	.01	.01	.00003*	.003*	.0006*	.001*	.006*	.002*	.02	.04	.003*	.001*	.001*	.05	.3*	.001*	.00003*
	4-11-62	8-15-62	.02*	.01*	1.1	3.	.01*	.02	.007	.0002*	.002*	.0005*	.001*	.005*	.001*	.002	.002	.002*	.001*	.001*	.009	.04	.001*	.00002*
ESCAMBIA RIVER																								
at Century, Florida	12-13-61	3-21-62	.02	.13	1.6	4.	.01*	.002*	.01	.00004*	.004	.005	.001*	.007*	.003*	.07	.001	.004*	.001*	.001*	.007	.4*	.001*	.00004*
	3-27-62	9-6-62	.02	.01*	.8	3.	.01*	.002*	.03	.0004*	.004	.0008*	.002*	.008*	.002*	.02	.004	.004*	.002*	.002*	.008	.02	.002*	.00004*

✱ ACTUAL VALUE IS LESS THAN THE AMOUNT SHOWN. REPORTED RESULT INDICATES LIMIT OF SENSITIVITY AT WHICH TEST WAS PERFORMED. SEE TEXT FOR EXPLANATION.

TRACE ELEMENTS
NATIONAL WATER QUALITY NETWORK
1960 - 1961

STATION	DATE		CONCENTRATION —— MILLIGRAMS PER LITER																					
			ANALYSIS BY WET OR FLAME METHOD					ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD																
	FROM	TO	B	F	K	Na	Se	Cd	Ba	Be	Pb	Cr	Sn	Sb	Mn	Fe	Ni	Bi	Mo	V	Cu	Zn	Co	Ag
GREAT LAKES Lake Erie at Buffalo, New York	1-3-62	3-21-62	.04	.13	2.	10.	.01*	.006*	.02	.0001*	.09	.002*	.004*	.02*	.008*	.06	.06	.01*	.004*	.004*	.2	1.*	.004*	.004
	3-20-62	6-15-62	.03	.14	1.6	10.	.01*	.004*	.04	.0008*	.008*	.002	.004*	.02*	.004*	.008	.004	.008*	.004*	.004*	.02	.2	.004*	.0002
Detroit River at Detroit, Michigan	12-26-61	3-19-62	.02	.16	1.9	5.	.01*	.004*	.02	.00007*	.007*	.001*	.003*	.01*	.005*	.03	.003*	.007*	.003*	.003*	.01	.7*	.003*	.00007*
	5-1-62	8-21-62	.02*	.03	1.1	4.	.01*	.003*	.005	.0005*	.005*	.001*	.003*	.01*	.003*	.005	.003*	.005*	.003*	.003*	.002	.03*	.003*	.00005*
St. Clair River at Port Huron, Michigan	12-12-61	3-20-62	.04	.04	1.6	3.	.01*	.004*	.009	.00007*	.007*	.001*	.003*	.01*	.005*	.03	.003*	.007*	.003*	.003*	.007	.7*	.003*	.00007*
	5-7-62	9-10-62	.05	.08	1.0	2.	.01*	.004*	.004	.0008*	.008*	.002*	.004*	.01*	.004*	.004	.004*	.008*	.004*	.004*	.006	.04*	.004*	.00008*
Lake Michigan at Gary, Indiana	12-12-61	3-20-62	.04	.22	2.0	6.	.01*	.006*	.02	.00009*	.009*	.009	.004*	.02*	.008*	.006	.004*	.009*	.004*	.004*	.002	.9*	.004*	.00009*
	5-2-62	9-25-62	.05	.19	1.3	3.	.01*	.005*	.005*	.001*	.01*	.002*	.005*	.02*	.005*	.005	.005*	.01*	.005*	.005*	.002	.05*	.005*	.0001*
Lake Michigan at Milwaukee, Wisconsin	12-12-61	3-20-62	.10	.11	1.6	5.	.01*	.005*	.009	.00009*	.009*	.04	.004*	.02*	.007*	.04	.005	.009*	.004*	.004*	.009	.9*	.004*	.00009*
	5-7-62	9-10-62	.11	.14	2.4	30.	.01*	.01*	.01	.002*	.02*	.004*	.01*	.04*	.01*	.01	.01*	.02*	.01*	.01*	.002	.1*	.01*	.0002*
St. Mary's River at Sault Ste. Marie, Mich.	12-12-61	3-20-62	.06	.00	.7	2.	.01*	.002*	.007	.00003*	.01	.0007*	.001*	.007*	.005	.03	.001*	.003*	.001*	.001*	.007	.3*	.001*	.00003*
	4-30-62	9-10-62	.03	.08	..5	1.	.01*	.002*	.004	.0004*	.004*	.0008*	.002*	.008*	.002*	.008	.002*	.004*	.002*	.002*	.002	.08	.002*	.00004*
Lake Superior at Duluth, Minnesota	12-12-61	3-20-62	.04	.00	.7	2.	.01*	.002*	.01	.00003*	.02	.0007*	.001*	.007*	.005	.01	.01	.003*	.001*	.001*	.07	.3*	.001*	.001
	5-7-62	8-27-62	.02*	.03	.6	2.	.01*	.001*	.008	.0002*	.002*	.0004	.001*	.004*	.002	.04	.001*	.002*	.001*	.001*	.008	.01*	.001*	.0008
GREEN RIVER at Dutch John, Utah	7-23-62	10-8-62	.12	.40	3.2	60.	.01*	.01*	.04	.002*	.02	.004*	.01*	.04*	.01*	.01*	.01*	.02*	.01*	.01*	.004	.1*	.01*	.0002
HUDSON RIVER below Poughkeepsie, N.Y.	12-13-61	3-7-62	.08	.06	1.6	10.	.01*	.004*	.01	.00007*	.007*	.006	.003*	.01*	.006*	.01	.004	.007*	.003*	.003*	.007	.7*	.003*	.00007*
	3-28-62	8-21-62	.03	.03	1.7	8.	.01*	.002*	.005	.0005*	.005*	.004	.002*	.009*	.002*	.005	.002*	.005*	.002*	.002*	.002	.02*	.002*	.0006
ILLINOIS RIVER near Grafton, Illinois	12-12-61	3-20-62	.12	.37	2.8	14.	.01*	.01*	.04	.0002*	.02*	.004*	.008*	.04*	.02*	.2	.008*	.02*	.008*	.008*	.01	2.*	.008*	.0002*
	3-26-62	8-20-62	.12	.30	3.7	15.	.01*	.008*	.06	.002*	.02*	.003*	.008*	.03*	.008*	.008	.007*	.02*	.008	.008*	.006	.08*	.008*	.0002*
at Peoria, Illinois	12-12-61	3-18-62	.17	.68	3.	22.	.01*	.01*	.03	.0002*	.02*	.004*	.008*	.04*	.02*	.08	.008	.02*	.008	.008*	.01	2.*	.008*	.0004*
	3-19-62	9-4-62	.15	.70	3.8	16.	.01*	.01*	.02	.002*	.02*	.004*	.01*	.04*	.01*	.01	.01*	.02*	.01	.01*	.01	.1*	.01*	.0002*
KANAWHA RIVER at Winfield Dam, W. Va.	12-21-61	3-16-62	.06	.06	1.4	7.	.01*	.003*	.07	.00005*	.005*	.0009*	.002*	.009*	.004*	.05	.006	.005*	.002*	.002*	.005	.3*	.002*	.00005*
	3-28-62	10-13-62	.05	.25	2.2	15.	.01*	.006*	.1	.001*	.01	.002*	.006*	.02*	.006*	.006	.006*	.01*	.006*	.006*	.007	.06*	.006*	.0001*
KLAMATH RIVER near Keno, Oregon	12-12-61	3-20-62	.12	.21	3.4	20.	.01*	.006*	.004	.0001*	.01*	.002*	.004*	.02*	.008*	.04	.01	.01*	.008	.01	.04	1.*	.004*	.0001*
	3-20-62	9-18-62	.05	.25	3.3	14.	.01*	.003*	.01	.0006*	.006*	.001	.003*	.01*	.003*	.003	.02	.006*	.003	.02	.05	.03*	.003*	.00006*
LITTLE MIAMI RIVER at Cincinnati, Ohio	4-26-62	9-26-62	.08	.25	3.2	10.	.01*	.008*	.03	.002*	.02*	.003*	.008*	.03*	.008*	.02	.008*	.02*	.008*	.008*	.03	.08*	.008*	.0007
MISSISSIPPI RIVER at New Orleans, La.	12-12-61	3-20-62	.06	.16	2.8	18.	.01*	.005*	.07	.00009*	.009*	.002*	.003	.02*	.009	.07	.003	.009*	.003	.003*	.007	.9*	.003*	.00009*
	5-24-62	9-6-62	.05	.25	3.1	14.	.01*	.007*	.04	.001*	.01*	.003*	.007*	.03*	.007*	.01	.007*	.01*	.007*	.007*	.003	.07*	.007*	.0001*
at Vicksburg, Miss.	12-18-61	3-19-62	.08	.06	2.8	9.	.01*	.004*	.01	.00006*	.01	.001*	.003*	.01*	.005*	.04	.007	.006*	.003*	.003*	.1	.6*	.003*	.001
	4-9-62	9-10-62	.03	.25	3.9	17.	.01*	.006*	.04	.001*	.01*	.003*	.006*	.03*	.006*	.01	.006*	.01*	.006*	.006*	.01	.06*	.006*	.0001*
at Delta, Louisiana	12-12-61	3-12-62	.09	.11	2.2	11.	.01*	.005*	.03	.00008*	.008*	.002*	.003*	.02*	.007*	.1	.005	.008*	.003*	.003*	.008	.8*	.003*	.00008*
	3-27-62	9-19-62	.10	.35	3.7	21.	.01*	.006*	.06	.001*	.01*	.003*	.006*	.03*	.006*	.08	.006*	.01*	.006	.006*	.006	.06*	.006*	.0001*
at West Memphis, Ark.	12-11-61	2-26-62	.05	.21	2.5	10.	.01*	.005*	.01	.00009*	.009*	.002*	.003*	.02*	.007*	.05	.003*	.009*	.003*	.003*	.007	.9*	.003*	.00009*
	5-5-62	8-27-62	.06	.30	3.9	15.	.01*	.006*	.05	.001*	.01*	.002*	.006*	.02*	.006*	.01	.006*	.01*	.006	.006*	.007	.06*	.006*	.002

* ACTUAL VALUE IS LESS THAN THE AMOUNT SHOWN REPORTED RESULT INDICATES LIMIT OF SENSITIVITY AT WHICH TEST WAS PERFORMED SEE TEXT FOR EXPLANATION.

TRACE ELEMENTS

NATIONAL WATER QUALITY NETWORK

1960 - 1961

STATION	DATE		CONCENTRATION —— MILLIGRAMS PER LITER																					
			ANALYSIS BY WET OR FLAME METHOD					ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD																
	FROM	TO	B	F	K	Na	Se	Cd	Ba	Be	Pb	Cr	Sn	Sb	Mn	Fe	Ni	Bi	Mo	V	Cu	Zn	Co	Ag
MISSISSIPPI RIVER (Contd.) at Cape Girardeau, Mo.	12-18-61 3-26-62	3-19-62 8-20-62	.05 .04	.14 .35	3.0 5.0	12. 17.	.01* .01*	.007* .007*	.05 .05	.0001* .001*	.01* .01*	.007 .003*	.009* .007*	.02* .03*	.1 .007*	.7 .01	.01 .007*	.01* .01*	.007 .007	.009* .007*	.07 .003	1.* .07*	.009* .007*	.001 .0001
at East St. Louis, Ill.	12-12-61 3-26-62	3-20-62 8-27-62	.08 .03	.32 .30	2.8 3.6	11. 11.	.01* .01*	.008* .007*	.06 .05	.0001* .001*	.01* .01*	.02 .003*	.006* .007*	.03* .03*	.01* .007*	.006 .007	.006* .007*	.01* .01*	.006 .007	.006* .007*	.008 .003	1.* .07*	.006* .007*	.0001* .0001*
at Burlington, Iowa	12-12-61 5-7-62	3-20-62 8-20-62	.09 .09	.11 .25	2.2 2.9	9. 6.	.01* .01*	.007* .005*	.07 .01	.0001* .001*	.01* .01*	.002* .002*	.004* .005*	.02* .02*	.009* .005*	.02 .005	.004* .005*	.01* .01*	.004* .005*	.004* .005*	.2 .02	1.* .05*	.004* .005*	.0001* .0001*
at Dubuque, Iowa	1-2-62 5-7-62	3-26-62 6-25-62	.08 .08	.11 .23	2.2 2.9	7. 6.	.01* .01*	.006* .005*	.04 .02	.0001* .001*	.01* .01*	.002* .002*	.004* .005*	.02* .02*	.01 .005*	.1 .1	.004 .005*	.01* .01*	.004* .005*	.004* .005	.02 .016	1.* .05*	.004* .005*	.0008 .0001
Lock and Dam #3 below St. Paul, Minn.	12-19-61 5-1-62	3-13-62 7-24-62	.13 .08	.32 .30	3.0 3.9	14. 9.	.01* .01*	.006* .007*	.03 .01	.0001* .001*	.01* .01*	.008 .003*	.009* .007*	.03* .03*	.08 .007*	.05 .007	.005* .007*	.01* .01*	.008 .007*	.009* .007*	.01 .006	1.* .07*	.005* .007*	.0001* .003
MISSOURI RIVER at St. Louis, Missouri	12-12-61 3-26-62	3-20-62 8-20-62	.11 .04	.53 .40	4.1 7.1	22. 28.	.01* .01*	.009* .008*	.09 .08	.0002* .002*	.02* .02*	.003* .003	.006* .008*	.03* .03*	.01* .008*	.06 .08	.006* .008*	.02* .02*	.006* .008	.006* .008	.009 .01	2.* .08*	.006* .008*	.0003 .002
at Missouri City, Mo.	12-12-61 4-3-62	3-20-62 9-25-62	.12 .10	.53 .40	5.6 8.3	27. 44.	.01* .01*	.01* .01*	.07 .1	.0002* .002*	.02* .02*	.003* .004*	.007* .01*	.03* .04*	.01* .01*	.007* .02	.007* .01*	.02* .02*	.007* .01*	.007* .01*	.03 .004	2.* .1*	.007* .01*	.0002* .0002*
at Kansas City, Kansas	12-12-61 3-26-62	3-20-62 8-20-62	.14 .08	.50 .46	5.5 8.4	24. 38.	.01* .01*	.01* .01*	.1 .08	.0002* .002*	.02* .02*	.004* .004*	.008* .01*	.04* .04*	.01* .01*	.2 .01	.008 .01*	.02* .02*	.008* .01	.008* .01	.08 .01	2.* .1*	.008* .01*	.0002* .0004
at St. Joseph, Missouri	1-8-62 5-7-62	3-5-62 8-20-62	.14 .08	.47 .46	5.6 8.4	38. 40.	.01* .01*	.01* .01*	.08 .1	.0002* .002*	.02 .02*	.004* .004	.008* .01*	.04* .04*	.02* .01*	.1 .06	.02 .01*	.02* .02*	.008 .01*	.008* .01	.3 .01	2.* .1*	.008* .01*	.02 .002
at Omaha, Nebraska	12-28-61 3-26-62	3-19-62 8-13-62	.20 .09	.63 .40	6.0 8.4	50. 36.	.01* .01*	.01* .01*	.02 .04	.0002* .002*	.02* .02*	.009* .004*	.009* .01*	.05* .04*	.02* .01*	.2 .04	.009 .01*	.02* .02*	.009 .01*	.009* .01*	.02 .002	2.* .1*	.009* .01*	.0002* .0002*
at Yankton, South Dakota	12-12-61 4-2-62	3-20-62 9-4-62	.20 .14	.57 .60	5.6 8.0	52. 58.	.01* .01*	.01* .01*	.05 .02	.0002* .002*	.02* .02*	.005* .004*	.009* .01*	.05* .04*	.02 .01*	.06 .01*	.009* .01*	.02* .02*	.009 .01*	.009* .01*	.3 .009	2.* .1*	.009* .01*	.0002 .0002*
at Bismarck, North Dakota	1-2-62 3-21-62	3-19-62 9-18-62	.17 .15	.70 .62	4.3 5.0	53. 60.	.01* .01*	.01* .012*	.04 .02	.0002* .002*	.02* .02*	.004* .005*	.009* .012*	.04* .05*	.02* .012*	.1 .01	.009* .01*	.02* .02*	.009 .01*	.009* .01*	.02 .02	2.* .1*	.009* .01*	.0002* .0005
at Williston, N. Dakota	2-2-62 4-2-62	3-12-62 8-20-62	.14 .12	.83 .46	4.5 4.7	44. 48.	.01* .01*	.01* .069*	.008* .018	.0002* .002*	.02* .018*	.004* .004	.008* .009*	.04* .04*	.02* .009*	.01 .009	.008* .009*	.02* .018*	.008* .009*	.008* .009*	.01 .007	2.* .09*	.008* .009*	.008 .0002*
MONONGAHELA RIVER at Pittsburgh, Pa.	1-3-62 5-1-62	3-19-62 9-17-62	.12 .06	.32 .35	2.2 3.6	11. 29.	.01* .01*	.005* .009*	.01 .02	.00009* .002*	.009* .03	.002* .003*	.004* .009*	.02* .03*	.1 .2	.004 .009	.02 .02	.009* .02*	.004* .009*	.004* .009*	.005 .07	.9* .03	.004* .009*	.00009* .0003
NORTH PLATTE RIVER above Henry, Nebraska	9-11-61 4-30-62	2-5-62 9-4-62	.12 .10	.36 .51	6.8 8.0	79. 80.	.01* .01*	.01* .01*	.09 .05	.0002* .003*	.02* .03*	.005* .005*	.009* .01*	.05* .05*	.02 .01*	.1 .01*	.009* .01*	.02* .03*	.01 .01	.009* .01	.02 .005	2.* .1*	.009* .01*	.0002* .0005*

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TRACE ELEMENTS

NATIONAL WATER QUALITY NETWORK

1960 - 1961

STATION	DATE		CONCENTRATION —— MILLIGRAMS PER LITER																					
	FROM	TO	ANALYSIS BY WET OR FLAME METHOD					ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD																
			B	F	K	Na	Se	Cd	Ba	Be	Pb	Cr	Sn	Sb	Mn	Fe	Ni	Bi	Mo	V	Cu	Zn	Co	Ag
OHIO RIVER at Cairo, Illinois	12-12-61 4-23-62	3-20-62 9-16-62	.08 .05	.14 .25	2.2 2.2	8. 9.	.01* .01*	.005* .006*	.03 .02	.00008* .001*	.008* .01*	.002* .002*	.003* .006*	.02* .02*	.006* .006*	.1 .01	.003 .006*	.008* .01*	.003* .006*	.003* .006*	.08 .007	.8* .06*	.003* .006*	.0006 .0001*
at Evansville, Indiana	1-2-62 3-26-62	3-19-62 9-24-62	.07 .05	.17 .30	2.8 2.7	10. 13.	.01* .01*	.003* .007*	.07 .03	.00008* .001*	.01 .01*	.008 .003*	.003* .007*	.02* .03*	.007* .007*	.005 .01	.03 .007*	.008* .01*	.005 .007*	.003* .007*	.02 .003	.8* .07*	.003* .007*	.00008* .0001*
at Louisville, Kentucky	12-12-61 4-3-62	3-20-62 8-28-62	.10 .06	.24 .30	2.8 3.3	7. 20.	.01* .01*	.004* .006*	.07 .04	.00007* .001*	.007* .01*	.001* .002*	.003* .006*	.01* .02*	.006 .006*	.01 .04	.003* .006*	.007* .01*	.003* .006	.003* .006*	.006 .005	.7* .06*	.003* .006*	.00007* .0001*
at Cincinnati, Ohio	1-3-62 3-28-62	3-21-62 9-26-62	.08 .03	.27 .30	2.5 3.0	9. 24.	.01* .01*	.003* .008*	.05 .03	.00009* .002*	.009* .02*	.002* .003*	.003* .008*	.02* .03*	.007* .008*	.05 .02	.009 .008*	.009* .02*	.005 .008*	.003* .008*	.1 .06	.9* .08*	.003* .008*	.001 .0002*
at Huntington, W. Va.	12-26-61 4-9-62	3-20-62 9-24-62	.07 .05	.27 .40	3.1 3.2	23. 29.	.01* .01*	.007* .008*	.04 .06	.0001* .002*	.01* .02	.007 .003*	.004* .008*	.02* .03*	.01 .008*	.02 .008	.004 .008*	.01* .02*	.004* .008*	.004* .008*	.1 .006	1.* .08*	.004* .008*	.001 .0002
below Addison, Ohio	6-12-62	10-8-62	.14	.40	5.5	57.	.01*	.01*	.04	.002*	.02*	.004*	.01*	.04*	.01*	.01*	.01*	.02*	.01*	.01*	.004	.1*	.01*	.0004
OUACHITA RIVER at Bastrop, Louisiana	12-11-61 4-23-62	3-26-62 9-17-62	.04 .10	.00 .20	2.0 3.2	16. 71.	.01* .01*	.002* .007*	.02 .07	.00004* .001*	.006* .01	.0008* .003*	.002* .007*	.008* .03*	.004 .007*	1.0 .007	.002* .007	.004* .01*	.002* .007*	.002* .007*	.06 .008	.4* .07*	.002* .007*	.00004* .0001*
PEND OREILLE RIVER at Albeni Falls Dam, Idaho	5-13-62	9-14-62	.10	.08	.8	3.	.01*	.002*	.02	.0004*	.004*	.0008*	.002*	.008*	.002*	.002	.002*	.004*	.002*	.002*	.004	.02*	.002*	.0002
PLATTE RIVER above Plattsmouth, Neb.	1-2-62 5-22-62	3-6-62 9-18-62	.10 .05	.34 .51	8.6 9.7	68. 43.	.01* .01*	.01* .009*	.2 .1	.0002* .002*	.02* .02	.005* .004*	.009* .009*	.05* .04*	.02* .009*	.02 .04	.009* .009*	.02* .02*	.009* .009*	.009* .02	.004 .03	2.* .09*	.009* .009*	.0002* .0002*
POTOMAC RIVER at Great Falls, Maryland	12-25-61 4-2-62	3-26-62 9-17-62	.02 .06	.03 .19	2.0 2.7	5. 11.	.01* .01*	.003* .005*	.006 .01	.00005* .001*	.005* .01*	.0009* .002*	.002* .005*	.009* .02*	.004* .005*	.05 .005	.002* .005*	.003* .01*	.002* .005*	.002* .005*	.003 .01	.5* .05	.002* .005*	.00005* .0002
at Williamsport, Maryland	12-18-61 4-30-62	3-19-62 9-17-62	.02 .02	.00 .14	1.6 2.0	4. 8.	.01* .01*	.002* .005*	.008 .01	.00004* .001*	.004* .01*	.003 .002*	.002* .005*	.008* .02*	.003* .005*	.04 .01	.002 .005*	.004* .01*	.002* .005*	.002* .005*	.004 .004	.4* .05*	.002* .005*	.00004* .0001*
RAINY RIVER at International Falls, Minnesota	1-2-62 4-23-62	3-26-62 9-4-62	.03 .01*	.03 .14	1.6 1.0	7. 1.	.01* .01*	.003* .001*	.02 .004	.00004* .0003*	.004* .003*	.0009* .0006*	.002* .001*	.009* .006*	.006 .001*	.04 .003	.003 .006	.004* .003*	.002* .001*	.002* .001*	.009 .01	.4* .06	.002* .001*	.00004* .00003
at Baudette, Minnesota	1-2-62 4-23-62	3-19-62 8-27-62	.03 .09	.06 .25	1.4 2.7	3. 16.	.01* .01*	.002* .009*	.008 .02	.00004* .002*	.004* .02*	.008* .004*	.002* .009*	.008* .04*	.03 .02	.008 .02	.002* .009*	.004* .02*	.002* .009*	.002* .009*	.03 .02	7.3 .5	.002* .009*	.00004* .0002*
RED RIVER (South) at Alexandria, La.	12-11-61 4-23-62	3-19-62 9-10-62	.04 .08	.05 .25	2.2 4.6	28. 75.	.01* .01*	.005* .01*	.04 .06	.00009* .002*	.009* .02*	.002* .004*	.004* .01*	.02* .04*	.007* .01*	.2 .01	.004* .01*	.009* .02*	.004* .01*	.004* .01*	.002 .008	.9* .1*	.004* .01*	.00009* .001
at Bossier City, La.	6-18-62	9-11-62	.18	.35	6.3	212.	.01*	.02*	.16	.004*	.04*	.008*	.02*	.08*	.02*	.02*	.02*	.04*	.02*	.02*	.02	[illegible]	.02*	.0004*
at Index, Arkansas	12-12-61 4-30-62	3-20-62 9-11-62	.10 .12	.14 .46	3.4 5.6	110. 138.	.01* .01*	.02* .02*	.1 .1	.0003* .003*	.03* .03*	.006* .007*	.01* .02*	.06* .07*	.02* .02*	.2 .02	.01* .02*	.03* .03*	.01* .02*	.01* .02*	.003 .007	3.* .2	.01* .02*	.0003* .0003*
at Denison, Texas	12-12-61 4-30-62	3-20-62 7-30-62	.14 .21	.33 .30	5.0 7.7	237. 196.	.01* .01*	.04* .03*	.1 .06	.0006* .006*	.06* .06*	.04 .01*	.02* .03*	.1* .1*	.05* .03*	.02* .03*	.02* .03*	.06* .06*	.02* .03*	.02* .03*	.06 .03	6.* .3*	.02* .03*	.006 .002

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STATION	DATE		CONCENTRATION —— MILLIGRAMS PER LITER																					
	FROM	TO	ANALYSIS BY WET OR FLAME METHOD					ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD																
			B	F	K	Na	Se	Cd	Ba	Be	Pb	Cr	Sn	Sb	Mn	Fe	Ni	Bi	Mo	V	Cu	Zn	Co	Ag
RIO GRANDE at Brownsville, Texas	12-12-61 4-26-62	3-20-62 10-1-62	.17 .40	.43 .64	3.9 7.8	85. 80.	.01* .01*	.01* .02*	.01* .06	.0002* .004*	.02* .04*	.005* .008*	.01* .02*	.05* .08*	.02* .02*	.02 .02*	.01* .02*	.02* .04*	.01* .02*	.01* .02*	.01 .004	2.* .2*	.01* .02*	.0003 .0004*
at Laredo, Texas	12-12-61 4-24-62	3-20-62 8-28-62	.18 .18	.76 .78	4.1 6.3	108. 85.	.01* .01*	.02* .01*	.07 .04	.0003* .003*	.03* .03*	.007* .005*	.01* .01*	.07* .05*	.03* .01*	.07 .01	.01* .01*	.03* .03*	.01 .01	.01* .01	.03 .005	3.* .1*	.01* .01*	.003 .0003*
at El Paso, Texas	12-12-61 4-30-62	3-20-62 8-27-62	.29 .20	.62 .56	9.3 11.0	270. 145.	.01* .01*	.04* .02*	.03 .04	.0007* .004*	.07* .04*	.01* .007*	.03* .02*	.1* .07*	.05* .02*	.03* .02*	.03* .02*	.07* .04*	.03 .02	.03* .02*	.004* .02	7.* .2*	.03* .02*	.0007* .002
below Alamosa, Colorado	1-2-62 3-26-62	3-19-62 9-4-62	.06 .90	.35 .72	3.8 6.4	16. 43.	.01* .01*	.006* .008*	.02 .03	.0001* .002*	.01 .02*	.02 .003*	.004* .008*	.2* .03*	1. .008*	2. .02	.004* .008*	.01* .02*	.006 .008	.004* .008	.008 .006	1.* .08*	.004* .008*	.0001* .0002*
ROANOKE RIVER at John Kerr Reservoir and Dam, Virginia	12-11-61 3-26-62	3-9-62 9-4-62	.18 .03	.49 .14	3.9 1.8	79. 3.	.01* .01*	.01* .002*	.01 .01	.0002* .0004*	.02* .004*	.005* .001	.009* .002*	.05* .01*	.02* .002*	.09 .03	.009* .002*	.02* .004*	.009* .002*	.009* .002*	.003 .004	2.* .02*	.009* .002*	.0002* .00004*
SABINE RIVER near Ruliff, Texas	12-12-61 3-26-62	3-20-62 9-24-62	.04 .04	.03 .08	2.2 2.9	20. 29.	.01* .01*	.004* .004*	.02 .03	.00006* .0007*	.006* .007*	.001* .001*	.002* .004*	.01* .01*	.02 .004*	.4 .01	.002 .007	.006* .007*	.002* .004*	.002* .004*	.2 .007	.6* .07	.002* .004*	.00006* .00007*
SACRAMENTO RIVER at Greens Landing above Courtland, Calif.	5-31-62	9-13-62	.06	.20	0.9	8.	.01*	.003*	.02	.0006*	.006*	.002	.003*	.01*	.003*	.04	.003*	.006*	.003	.003	.01	.03*	.003*	.00006
ST. LAWRENCE RIVER at Massena, New York	12-26-61 4-30-62	3-26-62 9-10-62	.03 .08	.00 .25	1.9 1.8	10. 9.	.01* .01*	.006* .006*	.04 .01	.00009* .001*	.009* .01*	.002* .002*	.004* .006*	.02* .02*	.008* .006*	.004* .01	.004* .006*	.009* .01*	.004* .006*	.004* .006*	.004 .004	.9* .06*	.004* .006*	.00009* .0001*
SAN JOAQUIN RIVER near Vernalis, California	7-18-62	9-19-62	.36	.20	6.4	119.	.01*	.01*	.06	.003*	.03*	.006*	.01*	.06*	.01*	.01	.01*	.03*	.01*	.01*	.006	.1*	.01*	.0003
SAN JUAN RIVER at Shiprock, New Mexico	12-19-61 6-4-62	3-12-62 9-17-62	.04 .12	.34 .51	3.8 5.4	69. 99.	.01* .01*	.02* .02*	.03 .04	.0003* .004*	.03* .04*	.006* .009*	.01* .02*	.06* .09*	.02* .02*	.2 .02*	.01* .02*	.03* .04*	.01* .02*	.01* .02*	.01 .03	3.* .2*	.01* .02*	.0003* .0004
SAVANNAH RIVER at Port Wentworth, Ga.	12-20-61 4-30-62	3-19-62 8-13-62	.02 .03	.03 .03	1.6 1.6	10. 14.	.01* .01*	.002* .001*	.005 .002	.00003* .0002*	.003 .002*	.0005* .0005*	.001* .001*	.005* .005*	.002* .001*	.05 .002	.03 .001*	.003* .002*	.001* .001*	.001* .001*	.03 .002	.3* .01*	.001* .001*	.0001 .00002
at North Augusta, S. C.	12-12-61 4-2-62	3-20-62 9-10-62	.03 .01*	.16 .08	2.0 1.4	4. 3.	.01* .01*	.001* .002*	.003 .01	.00002* .0004*	.002* .004	.003 .0008	.001 .002*	.004* .008*	.002* .002*	.03 .02	.0009* .002*	.002* .004*	.0009* .002*	.0009* .002*	.02 .02	.2* .08	.0009* .002*	.0002 .0006
SCHUYLKILL RIVER at Philadelphia, Pa.	12-18-61 4-2-62	3-26-62 8-24-62	.04 .12	.14 .40	3.0 4.1	10. 20.	.01* .01*	.006* .006*	.02 .03	.0001* .001*	.01* .01*	.002* .003*	.004* .006*	.02* .03*	.008* .006*	.02 .01	.01 .006*	.01* .01*	.004* .006*	.004* .006*	.02 .008	1.* .06*	.004* .006*	.0002* .0001*
SHENANDOAH RIVER at Berryville, Va.	12-12-61 5-8-62	3-20-62 9-19-62	.00 .04	.08 .08	2.0 3.2	9. 21.	.01* .01*	.005* .006*	.05 .04	.00008* .001*	.006* .03*	.002* .002*	.003* .006*	.02* .02*	.007* .006*	.05 .02	.003* .006*	.008* .01*	.003* .006*	.003* .006*	.2 .04	.8* .1	.003* .006*	.0007 .0001*
SNAKE RIVER at Ice Harbor Dam, Wash.	5-25-62	10-1-62	.10	.35	3.2	18.	.01*	.003*	.01	.0006*	.006*	.001*	.003*	.01*	.003*	.006	.003*	.006*	.003	.006	.01	.03*	.003*	.00006*
at Wawawai, Washington	1-8-62 4-9-62	4-2-62 8-27-62	.04 .03	.40 .20	3.1 1.9	22. 9.	.01* .01*	.006* .002*	.04 .006	.0001* .0004*	.01* .004	.002* .0008*	.004* .002*	.02* .008*	.008* .002*	.06 .004	.004* .002*	.01* .004*	.006 .002	.004 .004	.008 .003	1.* .02*	.004* .002*	.0001 .00004*
at Payette, Idaho	12-27-61 4-25-62	3-21-62 9-12-62	.10 .03	.74 .83	5.0 5.5	38. 25.	.01* .01*	.01* .004*	.03 .04	.0002* .001*	.07 .07	.003* .002*	.007* .004*	.03* .02*	.01* .004*	.2 .004*	.007* .004*	.02* .01*	.01 .01	.007* .01	.007 .007	2.* .04*	.007* .004*	.001 .0001

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SOUTH PLATTE RIVER at Julesburg, Colorado	12-12-61 5-28-62	3-20-62 10-1-62	.20 .24	.90 .72	10. 19.	128. 118.	.01* .01*	.04* .03*	.02 .03	.0006* .007*	.06* .07*	.01* .01	.02* .03*	.1* .1*	.05* .03*	.1 .07	.02* .03*	.06* .07*	.02* .03*	.02* .03*	.004* .007	6.* .3*	.02* .03*	.0006* .0007
SPOKANE RIVER at Post Falls Dam, Idaho	5-14-62	10-1-62	.10	.08	.8	2.	.01*	.001*	.008	.0002*	.002*	.0004*	.001*	.004	.001*	.002	.001*	.002*	.001*	.001*	.003	.006	.001*	.00002*
SUSQUEHANNA RIVER at Conowingo, Maryland	12-27-61 3-21-62	3-14-62 9-5-62	.03 .04	.08 .08	2.5 2.1	6. 9.	.01* .01*	.004* .005*	.003 .01	.00007* .001*	.007* .01*	.005 .002*	.003* .005*	.01* .02*	.005 .005*	.009 .005	.007 .005*	.007* .01*	.003* .005*	.003* .005*	.01 .006	.7* .05*	.003* .005*	.0007 .0001
at Sayre, Pennsylvania	12-12-61 4-2-62	3-20-62 9-17-62	.03 .03	.03 .19	2.0 1.7	5. 6.	.01* .01*	.003* .004*	.02 .02	.00005* .0008*	.005* .008*	.003 .002	.002* .004*	.01* .02*	.006 .004*	.02 .008	.002 .004*	.005* .008*	.002* .004*	.002* .004*	.007 .005	.5* .04*	.002* .004*	.00005* .00008*
TENNESSEE RIVER at Pickwick Landing Dam, Tennessee	1-2-62 2-13-62	3-20-62 9-13-62	.03 .01*	.08 .30	1.6 1.7	4. 3.	.01* .01*	.003* .003*	.003 .01	.00004* .0005*	.007 .006	.0009* .002	.002* .003*	.009* .01*	.004 .003*	.04 .02	.002* .003*	.004* .006*	.003 .003*	.002* .003*	.006 .02	.4* .03	.002* .003*	.00004* .003
at Bridgeport, Alabama	12-26-61 4-25-62	2-28-62 9-12-62	.03 .08	.08 .20	2.2 1.3	6. 6.	.01* .01*	.002* .002*	.007 .02	.00004* .0005*	.004* .005*	.0008* .001	.002* .002*	.008* .01*	.007 .002*	.03 .1	.002* .005	.004* .005*	.003 .002*	.002* .002*	.003 .006	.4* .05	.002* .002*	.00004* .00005*
at Chattanooga, Tenn.	12-27-61 5-2-62	4-4-62 9-19-62	.03 .05	.03 .20	1.6 1.3	4. 7.	.01* .01*	.003* .002*	.006 .03	.00004* .0005*	.004* .005*	.0009* .001	.002* .002*	.009* .01*	.003* .002*	.03 .04	.002* .002	.004* .005*	.002* .002*	.002* .002*	.03 .006	.4* .02*	.002* .002*	.003 .00005
at Lenoir City, Tenn.	12-12-61 3-19-62	3-20-62 9-17-62	.02 .05	.03 .14	1.9 2.0	7. 9.	.01* .01*	.004* .004*	.03 .02	.00006* .0008*	.006* .008*	.001* .002*	.003* .004*	.01* .02*	.005* .004*	.06 .008	.003* .004*	.006* .008*	.003* .004*	.003* .004*	.01 .01	.6* .04*	.003* .004*	.00008 .00008*
TOMBIGBEE RIVER below Columbus, Miss.	12-28-61 4-2-62	3-19-62 8-13-62	.08 .03	.00 .08	1.6 1.6	3. 3.	.01* .01*	.002 .002*	.02 .02	.00003* .0003*	.003 .003	.0006* .0006*	.001* .002*	.006* .006*	.004 .002*	.1 .006	.004 .002*	.003* .003*	.001* .002*	.001* .002*	.06 .003	.3* .02	.001* .002*	.0002 .00006
TRUCKEE RIVER at Fared, California below Calif.-Nev. border	1-8-62 4-9-62	3-12-62 9-28-62	.09 .02	.03 .14	2.2 1.7	7. 3.	.01* .01*	.003* .002*	.03 .01	.00005* .0004*	.005 .004*	.001* .0007*	.002* .002*	.01* .007*	.02 .002*	.08 .002	.07 .002*	.005* .004*	.003 .002	.002* .002*	.04 .004	.5* .07	.002* .002*	.0001 .00004
VERDIGRIS RIVER at Nowata, Oklahoma	3-26-62	9-17-62	.04	.30	3.8	52.	.01*	.009*	.09	.002*	.02*	.004*	.009*	.04*	.009*	.02	.009*	.02*	.009*	.009*	.004	.09*	.009*	.002
WABASH RIVER at New Harmony, Indiana	1-10-62 3-24-62	3-17-62 9-8-62	.03 .08	.14 .25	2.8 2.9	9. 12.	.01* .01*	.007* .007*	.07 .02	.0001* .002*	.01 .02*	.005 .003*	.005* .007*	.02* .03*	.01* .007*	.1 .02	.02 .007*	.01* .02*	.007 .007*	.005* .007*	.2 .003	1.* .07*	.005* .007*	.01 .0002*
WILLAMETTE RIVER at Portland, Oregon	8-13-62	9-7-62	.05	.14	1.1	6.	.01*	.002*	.004	.0004*	.004*	.0008*	.002*	.008*	.002*	.04	.002*	.004*	.002*	.002	.02	.04	.002*	.0003
YAKIMA RIVER at Richland, Washington	12-12-61 4-30-62	3-20-62 9-10-62	.06 .01*	.15 .30	2.5 3.3	12. 12.	.01* .01*	.004* .005*	.003 .02	.00007* .001*	.007* .01*	.001* .002*	.003* .005*	.01* .02*	.006* .005*	.006 .005	.003* .005*	.007* .01*	.003 .005*	.003* .01	.04 .006	.7* .05*	.003* .005*	.00007* .0001*
YELLOWSTONE RIVER near Sidney, Montana	12-26-61 4-2-62	3-19-62 9-6-62	.19 .12	.54 .35	4.9 4.5	72. 50.	.01* .01*	.01* .009*	.03 .03	.0002* .002*	.02* .02*	.005* .004*	.01* .009*	.05* .04*	.02* .009*	.1 .009*	.01 .009*	.02* .02*	.01* .009*	.01* .009*	.01 .008	2.* .09*	.01* .009*	.0002* .0002*

* ACTUAL VALUE IS LESS THAN THE AMOUNT SHOWN REPORTED RESULT INDICATES LIMIT OF SENSITIVITY AT WHICH TEST WAS PERFORMED SEE TEXT FOR EXPLANATION.

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